KERSTAR

Part of Absolent Air Care Group


**Category 2 (Dust Zone 21 / Gas Zone 1)**

**II 2 D Ex h IIIC T50°C Db**
**II 2 G Ex h IIC T6 Gb**

# KAV 15/18/20/30/45 Type H Dry Pickup Compressed Air Powered Vacuum Cleaner

Original Instructions

KAV 15/18/20/30/45 Type H | Version 1.0 | Last Updated December 20, 2024

**Abstract**

Front cover image (left - right): KAV 20H, KAV 30H and KAV 45H products.

# Table of Contents

# 1. Introduction

Welcome to the user manual for your new Kerstar® KAV Type H product! This manual refers to the KAV 15H, KAV 18H, KAV 20H, KAV 30H and KAV 45H products.

This manual should be retained with the product for future reference. Should the product be sold or transferred to another user, always ensure that it is supplied alongside it in order that the new user can be properly acquainted with the functioning of the product, as well as any safety warnings. It is dangerous to alter the specification or modify the product in any way.

Kerstar® products are manufactured by Filtermist International Limited. If you have any enquiries, please do not hesitate to contact our team on (0) 1952 290500 or sales@filtermist.com. Further product information can be found on www.kerstar.com.

Your product is designed to pick up: non-explosive dust and debris in an unzoned atmosphere; non-explosive dust and debris in a Gas Zone 1 atmosphere (a Gas Zone 1 atmosphere is where flammable gases, vapours and mists are likely to occur; dust and debris that may explode if ignited (Dust Zone 21) in an area where no flammable gases, vapours or mists are present; dust and debris that may explode if ignited (Dust Zone 21) in a Gas Zone 1 atmosphere; dust and debris that is hazardous to health where a Gas Zone 1 and/or Dust Zone 21 atmosphere may or may not be present.

## 1.1. ATEX/UKEX Risk Assessment

If this product is used for collecting flammable/explosive materials or within a zoned area classified under the ATEX/UKEX Directive **2014/34/EU** or **Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016: Great Britain**, then a risk assessment must be carried out by a competent person to verify the suitability of the application. This assessment will be the responsibility of the customer/end user. It should take into account, but not be limited to, the characteristics of the material being collected, such as:

- Spark ignition sensitivity (e.g., measured by minimum ignition energy (MIE)).
- Hot surface ignition sensitivity (cloud and layer) (e.g., as a function of fuel–air equivalence ratio (ϕ) and chamber pressure).
- Explosion severity (e.g., with maximum pressure (Pmax) and/or the dust constant (Kst)).
- Burning behaviour (e.g., with a Combustibility Class measurement).
- Thermal and chemical instability (e.g., thermal stability with a thermogravimetric analyzer (TGA), chemical stability using liquid or gas chromatography (HPLC – GC), mass spectrometry (MS), and infrared spectroscopy (FTIR)).
- Static electricity generation (e.g., using an electrostatic sensor).
- The ATEX/UKEX certification code for the appliance being assessed (see Rating Plate).

## 1.2. Type H Risk Assessment

If this product is used for collecting dust and/or debris which may be hazardous to health if inhaled, ingested or in contact with the skin, then a risk assessment must be carried out by a competent person to verify the suitability of the application. The risk assessment is the responsibility of the customer/end user and should take into account - but not be limited to - the characteristics of the material being collected, such as:

- The occupational exposure limit of the dust and debris being collected (e.g., using the COSHH standard Workplace Exposure Limits (WELs)).
- The particle size of the dust and debris being collected (e.g., using optical and condensation particle counters, and/or photometers / nephelometers).
- The method of disposal.

# 2. Installation, Commissioning and Handling

## 2.1. Specific Conditions of Use

- Outdoor use should be avoided. Take care if you use your product outdoors - and it should never be stored outdoors.
- Air compressors used to supply your product must incorporate a filter on the intake system to avoid ingress of dust or foreign material into the parts where compression takes place. They must employ only lubricants which are resistant to ignition or carbonisation within the equipment's operating temperature range.
- During use, the air supply hose should be kept away from heat, oil, sharp edges and rough surfaces. If there is a risk of the air supply hose being severed, an air fuse should be fitted - this fuse can be purchased from Kerstar® if one is required. If your air supply hose is damaged and needs replacing, it must be replaced by a conductive supply hose available from Kerstar® - do not use any other air supply hose. Doing so may invalidate your warranty.
- When collecting dust or debris that may ignite or explode, empty the cleaner after every use.
- Only Type H models are suitable for picking up hazardous dusts[1] that may endanger health.
- W/D models are not suitable for picking up flammable or corrosive liquids; always remove liquids from the container after use. For W/D models, the magnitude of vibration emissions for the machine at the hose end is below 2.5m/s².
- Dry and Type H models are designed for dry use only. If wet use if required, ensure that you have an appropriate W/D model that it is set appropriatley for wet pickup.

**DANGER!** This product is not suitable for collecting radioactive dust, dust with an ignition energy of less than 1mJ[2], or pyrophoric[3] or self-reactive dusts.

**DANGER!** Do not pick up glowing dust or other ignition hazards. When picking up swarf and similar metallic parts, the product must not be used to pick up potentially explosive dusts or be used in potentially explosive atmospheres.

**DANGER!** Never remove a Type H vacuum cleaner from a contaminated area unless it has been decontaminated in accordance with the "Decontamination" section in this manual.

**IMPORTANT!** Never use this product without the full filtration system fitted.

**IMPORTANT!** Do not use the product for dry vacuuming with the filters and/or microfibre bag removed.

## 2.2. Unpacking

Unpack the carton and ensure that you have a complete set of accessories as listed in the table below, alongside your vacuum cleaner. A/S = Antistatic/Conductive.

[1]Such dusts are defined as non-radioactive, non-explosive dusts that are hazardous to health if inhaled, ingested or if in contact with the skin. A hazardous dust can be defined as very toxic, harmful, corrosive or irritant; microorganisms may be considered as dusts creating a hazard to the health of a person.

[2]Millijoule, equivalent to one thousandth ($10^{-3}$) of a joule.

[3]Liable to ignite spontaneously on exposure to air.

### Table 1. Components for KAV Dry, Wet/Dry and Type H Series Products

| Component Description | Quantity |
|---|---|
| Yellow A/S Air Supply Hose | 1 |
| 38mm x 3m A/S Hose Assembly | 1 |
| 38mm Stainless Steel Bent Hose End | 1 |
| 38mm Stainless Steel Wands | 2 |
| 38 x 375mm A/S Heavy Duty Floor Tool with Brushes | 1 |
| 38mm Crevice Tool A/S Plastic | 1 |
| 38 x 70mm A/S Dusting Brush | 1 |
| 38 x 100mm A/S Dusting Brush | 1 |
| Microfibre Bags to suit your model | 5 |
| Yellow Earth Path Continuity Certificate | 1 |

Optional extras are available. These include:

- **Hose and Accessory Basket**. This is a zinc plated tool basket to prevent a build up of static - it can be fitted by hanging from the two horizontal crossbars on the rear of the caddy.
- **KAVIT Interceptor Tank**.

Wet/Dry pickup models can also be supplied with a Dump Valve and a 32 x 800mm Drain Hose and Stopper. These allow the emptying of liquid from the canister without removing the air motor head and float assembly.

**WARNING!** The dump valve or drain hose and stopper is only suitable for emptying liquids from the canister. If the dump valve or drain hose requires cleaning, a damp or wet cloth should be used - **DO NOT** use a dry cloth.

Models on a caddy (KAV 18/30/45 Dry Pickup, 18/30/45 W/D Pickup, 18/30/45 Type H Dry Pickup) are packed with the caddy handle removed for transport/packing purposes. Refit handle before use.

## 2.3. Electrical Information

In most KAV products, the air supply hose has a special conductive lining to dissipate any static build up down to earth. The end piece you fit must be metal and your air supply pipe system / compressed air connection point must be earthed.

It is strongly advised that the earth path continuity between the pick-up tool and the earthed air supply system be checked by a competent person at regular intervals and documentary records be kept of these checks.

## 2.4. Commissioning

Follow this procedure to commission your KAV Series product. Ensure that you are in possession of a 500-volt megohmmeter[4] prior to commencing.

1. Attach the antistatic air supply hose to the air inlet port on the KAV. Do not over-tighten the connection and do not use any form of liquid thread locker or PTFE[5] tape to seal the thread. The threaded end fitting has its own integral O ring seal. Please note, if you use liquid thread sealer or PTFE tape you may create an insulated barrier so that any static build up cannot dissipate to earth down the air supply hose.
2. To the other end of the air supply hose fit a metal (conductive) fitting to suit your air outlet sockets. Make sure the pipework and outlet fittings of your air supply system are constructed entirely of metal pipes and fittings and is earthed to your compressor.

[4]An electrical instrument used to measure the electrical resistance of insulators.

[5]Polytetrafluoroethylene, a fluoropolymer.

3. Finally, using a 500-volt megohmmeter, measure the resistance between the body of the KAV and the metal air supply pipe. The reading should be no more than 50 Megohm (MΩ) (5 x 107 Ohm).

**IMPORTANT!** Appropriate Personal Protective Equipment (PPE) in the form of ear defenders should be worn while using this product.

This product is not intended for use by children. Where children are present, they must be supervised at all times to prevent them from playing with or using the machine in any way. Additionally, this appliance is not intended for use by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.

## 2.5. Carrying and Storage

The assembled vacuum cleaner can be moved around either by pulling the hose, using the flip/flop handle on the motor head or by means of the tubular handle (models on caddy only). It must **NOT** be dragged around by means of the power supply cable. Do not tug at the mains supply cable to remove the plug from the wall socket. When not in use, your vacuum should be disconnected from the power supply and stored indoors in a dry environment.

# 3. Operation

To operate your KAV, follow this procedure:

1. Connect the KAV to a suitable compressed air supply.
2. Attach the antistatic hose assembly to the canister and connect the stainless steel bent hose end and wands.
3. Choose and attach one of the antistatic tools supplied.
4. To activate your KAV, turn the lever on the control valve through **90°**. The performance of the vacuum cleaner can be controlled with the control valve, but it is advisable to fit a regulator and pressure gauge at the air outlet point of your compressed air supply.

**DANGER!** The maximum pressure must be no more than 120 psi[6] (8.3 bar).

## 3.1. Compressed Air Requirements

The KAV range does not require the air supply to be dried or filtered. However, it is advisable to use an air supply that can be regulated so that the performance of the unit can be adjusted to suit the operator. The performance of the unit is related to the air input - the more pressure and/or volume of air input the more suction and/or induced airflow is generated.

**CAUTION!** Using excessive air input wastes compressed air, generates unnecessary noise and may cause implosion of the canister and/or bursting of the microfibre bags/filters (where fitted).

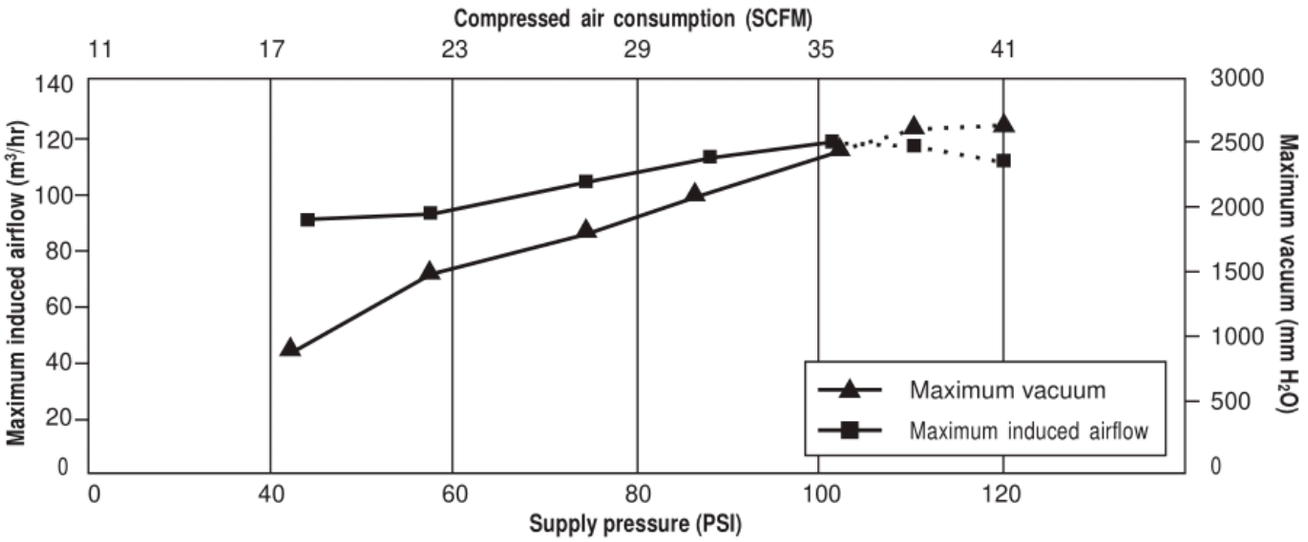


**Figure 1.** Compressed air requirements for KAV series models. Optimum performance is achieved at an air input pressure of 90-120psi (6.2-8.3 Bar).

## 3.2. Filtration System

Your vacuum cleaner is fitted with three stages of filtration on the negative pressure side of the air motor (i.e., before the air motor, so that the air motor always receives clean filtered air). These stages are as follows:

[6]pound per square inch. 1 psi = 0.069 bar.

- **First Stage:** K1 or K4 disposable microfibre bag. K1 and K4 disposable bags are made from microfibre material. Microfibre bags offer better filtration efficiency, greater tear resistance from sharp debris than paper bags and are less likely to burst when full of heavy dust/debris. They are fitted over the inlet inside the canister and the dust/debris is collected inside the bag. They are fitted with a moulded plastic flange and sealing cap - the cap is designed to prevent the escape of dust from the bag during the bag change and disposal process. When the bag is full or suction efficiency is impaired it should be replaced - please note that microfibre bags are not designed to be emptied and should not be reused.
- **Second Stage:** Antistatic cloth filter assembly. A conductive needlefelt cloth filtration media attached to a conductive rubber sealing ring and supported by a conductive plastic rigid filter frame.
- **Third Stage:** HEPA (High Efficiency Particulate Arrestor) cartridge filter; often referred to as the essential or absolute filter. It is designed to filter to a very fine particle size (0.3 - 0.6 microns at an efficiency >99.995%) yet have a large enough surface area to give maximum vacuum performance.

**NOTE!**The casing of the HEPA filter housing is made of metal. It is earth bonded to the body of the vacuum cleaner in order to dissipate any static built up in the HEPA filter.

**DANGER!** Do not use the appliance unless the full filtration system is fitted. In Type H models a full filtration system may comprise the Type H HEPA cartridge, antistatic high efficiency cloth filter and microfibre bag. Failure to fit the complete system may cause premature clogging of the Type H cartridge and may also endanger health.

# 4. Maintenance

Inspection must be carried out at least annually. Maintenance and cleaning procedures must only be carried out by competent, authorized and instructed personnel equipped with suitable personal protective equipment (PPE). They must be carried out in a suitable controlled area with local filtered exhaust ventilation and facilities for cleaning the area after servicing.

Prior to performing maintenance, always turn the power off and disconnect your machine from the air and/or electrical supply.

All parts must be regarded as contaminated and treated as such - another Type H vacuum cleaner should be used and each component to be removed and cleaned prior to removal.

Items that cannot be satisfactorily cleaned must be disposed of in impervious plastic bags in accordance with current regulations. All surfaces should be cleaned as they become exposed. Do not operate your unit without the full filtration system fitted.

## 4.1. Decontamination

Before removing the vacuum cleaner and accessories from the contaminated area, the following decontamination procedures should be followed.

To decontaminate an accessory:

1. Clean your accessory externally with a Type H vacuum cleaner.
2. Then, clean it with an adhesive wipe.
3. Seal the accessory at each end.
4. Seal it again within a clear, impervious plastic bag. Ensure that an appropriate warning label is attached to the exterior of this bag.
5. Clean the external surfaces of the bag with an adhesive wipe.

To decontaminate a vacuum cleaner:

1. Clean the vacuum cleaner externally with itself.
2. Remove and dispose of the disposable bag and its contents, in accordance with the aforementioned method (see **Dust/Debris Disposal**).
3. Clean the vacuum cleaner externally with an adhesive wipe.
4. Seal the vacuum cleaner inside a clear, impervious plastic bag. Ensure that an appropriate warning label is attached to the exterior of this bag.
5. Clean the external surfaces of the bag with an adhesive wipe.

## 4.2. Dust/Debris Disposal

**The disposal of dust and/or debris should always be carried out within the contaminated area.**

The following procedure should be used to dispose of dust/debris:

1. Disconnect the hose from the vacuum cleaner and fit the blanking cap on to the hose entry.
2. Unlatch the toggle clips and remove the motor head/HEPA unit - take care not to drop the motor head/HEPA unit.
3. Remove the antistatic filter assembly and carefully release the disposable bag from the bag tube and lift out of the canister.

4. Seal the disposable bag inlet using the integral cap on the bag collar.

**IMPORTANT!** The disposable bag should be immediately placed in a suitably labelled impervious plastic bag and this bag sealed and disposed of in accordance with the current regulations.

5. Fit a new disposable bag over the bag tube inside the canister.

This vacuum cleaner is supplied with a spare antistatic filter assembly - this (clean) spare filter should be used and the motor head/HEPA unit refitted. Type H models are supplied with five spare microfibre bags.

The contaminated antistatic filter should now be cleaned by vacuuming and stored in a labelled plastic bag ready for future use.

# 5. Loss of Suction and Thermal Switch

If your vacuum cleaner loses suction power, first check that the hose and other accessories in use are not blocked. To clear a blockage, insert a long object into the nozzle connector to clear the airway.

If the hose or accessories are not blocked, check that the filtration system itself is not blocked. The different aspects of the system can be serviced as follows.

## 5.1. Disposable Bags

If the bag is full, replace. If it is burst, clean out the canister by vacuuming it with another vacuum cleaner (ensure that this is rated **ATEX/UKEX Category 3/Dust Zone 22**) and replace the bag. Suction should now be restored if a full or burst bag was the cause of the loss of suction.

## 5.2. Antistatic Cloth Filter Assembly

The filter assembly will become contaminated with dust during normal use and/or if the disposable bag is holed or burst. The dust must be removed, either by brushing off, or preferably by vacuuming with another vacuum (ensure that this is rated **ATEX category 3/Dust Zone 22**).

It is advisable to have a spare filter - this can be placed in the machine which can then be used to vacuum the dust off the contaminated filter, after which it becomes the spare. If any of the filters or microfibre bags are damaged or holed they must be replaced with new items.

## 5.3. HEPA Cartridge Filter

The HEPA cartridge is only found in certain product lines.

**The HEPA cartridge is neither reusable nor cleanable and it should be disposed of safely**. When it becomes excessively clogged and the vacuum performance of the appliance suffers or is no longer acceptable, fit a new cartridge.

Be careful when handling and fitting HEPA cartridges; damage to the pleated element and/or seals will affect the performance and may cause a leakage through the filter of unfiltered air. If the **thermal switch** activates to protect the motor first check the hose, tools and filtration system as described above. If these are clear and not blocked, the inlet cooling air HEPA filter may be clogged; this can be replaced by removing the cover for the inlet cooling air HEPA filter.

# 6. Guarantee and Servicing

## 6.1. Guarantee

All Kerstar® products are guaranteed for 12 months against defective parts and workmanship, excluding parts subject to normal wear and tear. Please note that there are certain conditions that may invalidate this guarantee:

- Not adhering to the instructions provided in this manual. This appliance must be correctly installed and used in accordance with these instructions.
- The use of unauthorised personnel for servicing, repair or modification of the appliance.

**WARNING!** Under no circumstances should you attempt to repair this appliance yourself. **Repairs undertaken by unauthorised or inexperienced persons may cause injury and/or serious malfunctioning**. This appliance must only be serviced by authorised Kerstar® personnel or distributors. Only genuine Kerstar® spare parts should be used.

We may introduce modifications to our products from time to time and consequently the details given in this user manual are subject to alteration without notice.

## 6.2. Servicing

Should your Kerstar® product require servicing, spares or repairs, please contact us on (+44) 1952 290500. Please make a note of the model and serial number before contacting us.

Before attempting any servicing of Type H appliances, decontaminate as described in this user manual and make sure you are protected from any dust which may still be present on or around the machine or any dust which may have collected on internal components.

Ensure that only the hose and accessories provided with the product are used. For ATEX rated products these have been ATEX/UKEX tested and assessed as suitable for use with the product. A wider range of ATEX/UKEX approved nozzles is available from Kerstar®. Disconnect all models from the electrical supply before carrying out maintenance.

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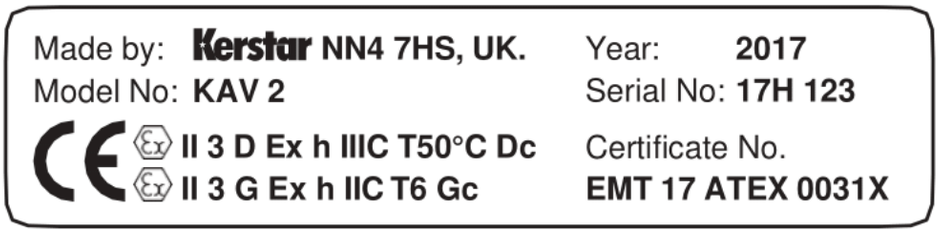
# 7. Rating Plate

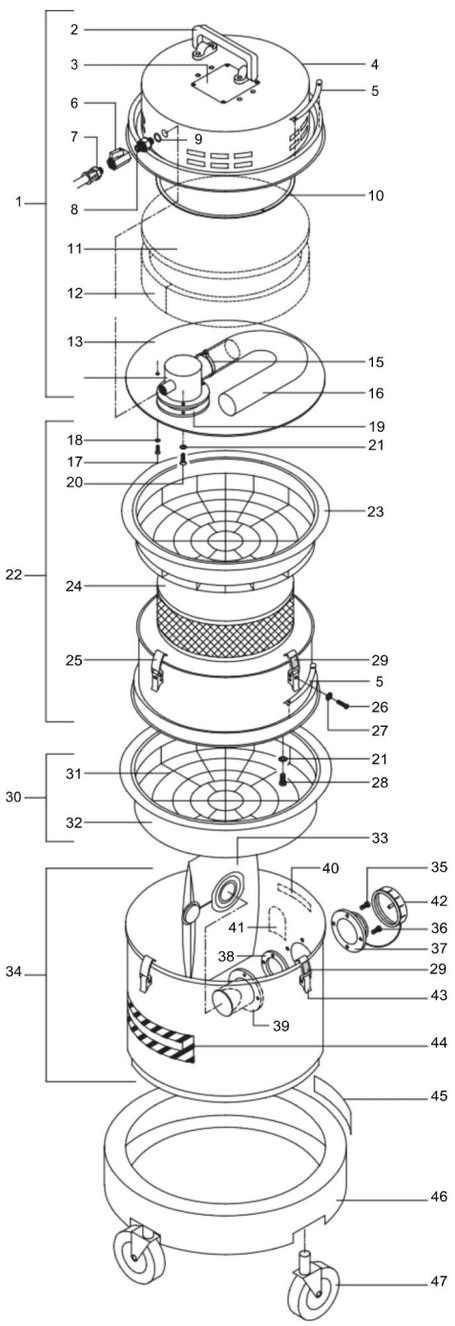
Every Kerstar® product is fitted with a Rating Plate that contains important information pertaining to your product. The rating plate may contain the following information:

| Information | Meaning |
|---|---|
| **Manufacturer Name and Address** | The details of the manufacturer of the product. |
| **Model or Type Number** | The specific model of your product (e.g., KAV 20H). |
| **Year of Manufacture, Assembly or Construction** | The year that your product was manufactured. |
| CE | A mark certifying compliance with European Union regulations, standing for "Conformité Européenne". |
| UK CA | A mark certifying compliance with United Kingdom regulations, standing for "United Kingdom Conformity Assessed". |
| Ex | The distinctive community mark showing a product is suitable for use in an explosive dust and/or gas atmosphere. |
| **II** | Equipment Group II (Surface Industries) |
| **3** | Category 3 product |
| **2** | Category 2 product |
| **G** | Explosive gas, vapour or mist atmosphere |
| **h** | Mechanical equipment according to EN 80079-36 |
| **Tc** | Level of protection for electrical equipment (for EPL Dc) |
| **IIIC** | Conductive dusts |
| **T100°C** | Surface temperature less than 100°C for dust evaluation |
| **D** | Explosive dust atmosphere |
| **Dc** | IECEx Equipment Protection Level |
| **Ta = 0ºC to +30ºC** | Suitable for use in an ambient temperature range of 0ºC to +30ºC |
| **IP6X Dust tight (electrical compartment)** | No ingress of dust |
| **Weight** | Weight of the unit |
| **KEVA** | Acronym for "Kerstar Electric Vac Atex" |
| **Ex h** | Protection concept – constructional safety (applies to the mechanical parts of the vacuum cleaner) |
| **IIIC T50°C Dc** | IIIC dust group – conductive dust (T50°C surface temperature for dust evaluation less than 50°C) (Dc dust atmosphere EPL (Equipment Protection Level) Zone 22) |
| **IIC T6 Gc** | IIC gas group. Suitable for group II gases, vapours and mists (e.g., Hydrogen). T6 surface temperature classification for gases, vapours and mists less than 85°C. Gc gas atmosphere EPL (Equipment Protection Level) Zone 2. |
| **Serial Number** | For example 17H 123 – made in August 2017 number 123 |
| **X** | Refer to instruction book for special operating or user information |
| **ATEX Cert No. EMT17ATEX0050X** | The product has been tested and approved by an independent test house. |
| **UKEX Cert No. EMA21UKEX0068X** | The product has been tested and approved by an independent test house. |
| **Technical File Ref KAV15 – 45** | The technical file is lodged at Element Materials Technology Ltd. |



# 8. Spare Parts

The following tables list spare parts for each KAV Type H model.

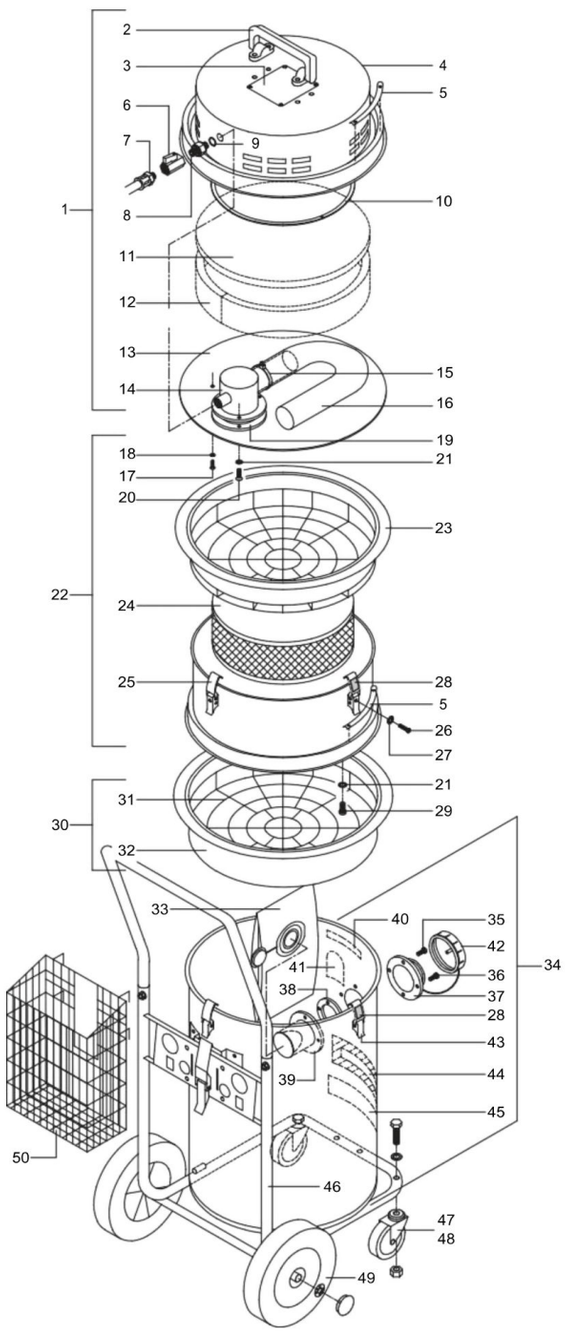



[a] A/S = Anti-static / Conductive

## Table 2. Spare Parts for KAV 15H

| Item | Quantity | Description | Part Number |
|---|---|---|---|
| 1 | 1 | KAV 15H Motor Head and Air Supply Hose | 25-204-20-819 |
| 2 | 1 | A/S[a] Flip Flop Handle Assembly | 25-215-10-068 |
| 3 | 1 | KAV 15-45H Rating Plate | 25-216-10-028 |
| 4 | 1 | KAV 15 and 18 Top Pressing | 25-204-10-485 |
| 5 | 2 | Earth Strip Curved | 25-204-10-531 |
| 6 | 1 | Ball Valve | 25-215-10-072 |
| 7 | 1 | Air Supply Hose A/S 5 Metre | 25-204-10-490 |
| 8 | 1 | 1/4 BSP Male to Male Nipple | 25-204-10-1607 |
| 9 | 2 | Soft Metal Washer | 25-215-10-074 |
| 10 | 1 | 800 x 4 x 6mm Foam Rubber Seal | 25-325-10-025 |
| 11 | 1 | Foam Silencing KAV 15/18 Top | 25-320-10-017 |
| 12 | 1 | Foam Silencing KAV 15-45 Side | 25-320-10-031 |
| 13 | 1 | KAV 15 and 18 Motor Plate | 25-204-10-486 |
| 14 | 1 | Air Motor | 25-217-10-056 |
| 15 | 1 | Tyrap for Sound Attention Hose | 25-215-10-075 |
| 16 | 1 | 330 x 40mm Sound Attenuation Hose | 25-320-10-006 |
| 17 | 4 | M4 x 12 Pan Pozi Screw | 25-215-10-094 |
| 18 | 4 | M4 Shakeproof Washer | 25-215-10-102 |
| 19 | 1 | Gasket for Air Motor | 25-325-10-027 |
| 20 | 3 | M5 x 16 Pan Pozi Screw | 25-215-10-124 |
| 21 | 9 | M5 Shakeproof Washer | 25-215-10-150 |
| 22 | 1 | KAV 15 and 18H HEPA Filter Assembly | 25-712-20-054 |
| 23 | 1 | 12" A/S Sealing Ring and Frame | 25-325-10-004 |
| 24 | 1 | KAV 15 and 18H HEPA Filter | 25-712-10-074 |
| 25 | 3 | Clip for KV15 and 18H with Lock Down Facility | 25-215-20-006 |
| 26 | 3 | M4 x 20 Pan Pozi Screw | 25-215-10-096 |
| 27 | 3 | Retaining Ring for M4 Screw | 25-215-10-114 |
| 28 | 6 | M5 x 16 Pan Pozi Screw | 25-215-10-124 |
| 29 | 2 | Clip Here Yellow Label 16 x 25mm | In-House Printed Label |
| 30 | 1 | 12" A/S Filter Assembly | 25-712-20-014 |
| 31 | 1 | 12" A/S Filter Frame | 25-204-10-385 |
| 32 | 1 | 12" A/S Filter Cloth | 25-712-10-032 |
| 33 | 1 | K1 Microfibre Bag | 25-712-10-007 |
| 34 | 1 | KAV15H Can Assembly | 25-204-20-923 |
| 35 | 2 | M5 x 20 Pan Pozi S/Steel Screw | 25-215-10-145 |
| 36 | 2 | M5 x 16 Pan Pozi S/Steel Screw | 25-215-10-144 |
| 37 | 1 | Hose Entry Spigot Outer A/S | 25-204-10-255 |
| 38 | 1 | Spigot Retainer | 25-204-10-253 |
| 39 | 1 | S/Steel Deflector | 25-204-20-187 |
| 40 | 1 | ATEX/UKEX Category 2 Black on Yellow Label | 25-216-10-059 |
| 41 | 1 | Zone 1/21 Warning Label | 25-216-10-063 |
| 42 | 1 | A/S Blanking Cap and Strap | 25-204-20-182 |
| 43 | 3 | Clip for Max, Prima, KV5, 10, 15 & 18 | 25-215-20-004 |
| 44 | 1 | Type H Warning Label Red/White Foil | 25-216-10-067 (FOIL BACK) |
| 45 | 2 | Kerstar Red/Silver Label | 25-216-10-094 |
| 46 | 1 | KAV15 A/S Chassis (No Castors) | 25-204-20-1075 |
| 47 | 4 | 75mm A/S Push In Castor | 25-215-10-012 |

[a] A/S = Anti-static / Conductive

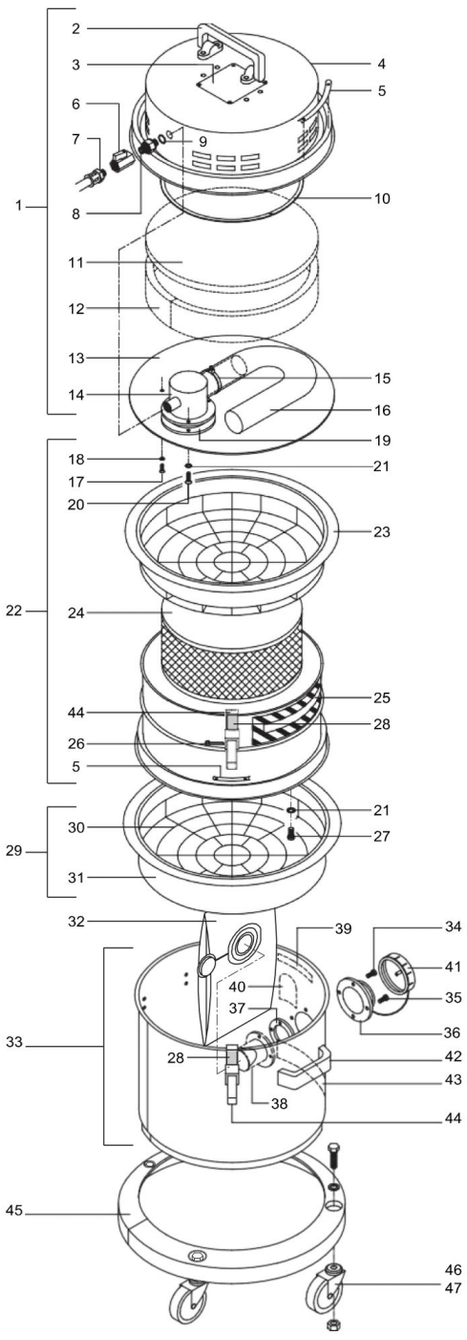



[a] A/S = Anti-static / Conductive

## Table 3. Spare Parts for KAV 18H

| Item | Quantity | Description | Part Number |
|---|---|---|---|
| 1 | 1 | KAV 18H Motor Head and Air Supply Hose | 25-204-20-834 |
| 2 | 1 | A/S[a] Flip Flop Handle Assembly | 25-215-10-068 |
| 3 | 1 | KAV 15-45H Rating Plate | 25-216-10-028 |
| 4 | 1 | KAV 15 and 18 Top Pressing | 25-204-10-485 |
| 5 | 2 | Earth Strip Curved | 25-204-10-531 |
| 6 | 1 | Ball Valve | 25-215-10-072 |
| 7 | 1 | Air Supply Hose A/S 5 Metre | 25-204-10-490 |
| 8 | 1 | 1/4 BSP Male to Male Nipple | 25-204-10-1607 |
| 9 | 2 | Soft Metal Washer | 25-215-10-074 |
| 10 | 1 | 800 x 4 x 6mm Foam Rubber Seal | 25-325-10-025 |
| 11 | 1 | Foam Silencing KAV 15/18 Top | 25-320-10-017 |
| 12 | 1 | Foam Silencing KAV 15-45 Side | 25-320-10-031 |
| 13 | 1 | KAV 15 and 18 Motor Plate | 25-204-10-486 |
| 14 | 1 | Air Motor | 25-217-10-056 |
| 15 | 1 | Tyrap for Sound Attention Hose | 25-215-10-075 |
| 16 | 1 | 330 x 40mm Sound Attention Hose | 25-320-10-006 |
| 17 | 4 | M4 x 12 Pan Pozi Screw | 25-215-10-094 |
| 18 | 4 | M4 Shakeproof Washer | 25-215-10-102 |
| 19 | 1 | Gasket for Air Motor | 25-325-10-027 |
| 20 | 3 | M5 x 16 Pan Pozi Screw | 25-215-10-124 |
| 21 | 9 | M5 Shakeproof Washer | 25-215-10-150 |
| 22 | 1 | KAV 15 and 18H HEPA Filter Assembly | 25-712-20-054 |
| 23 | 1 | 12" A/S Sealing Ring and Frame | 25-325-10-004 |
| 24 | 1 | KAV 15 and 18H HEPA Filter | 25-712-10-074 |
| 25 | 3 | Clip for KV15 and 18H with Lock Down Facility | 25-215-20-006 |
| 26 | 3 | M4 x 20 Pan Pozi Screw | 25-215-10-096 |
| 27 | 3 | Retaining Ring for M4 Screw | 25-215-10-114 |
| 28 | 2 | Clip Here Yellow Label 16 x 25mm | In House Printed Label |
| 29 | 6 | M5 x 16 Pan Pozi Screw | 25-215-10-124 |
| 30 | 1 | 12" A/S Filter Assembly | 25-712-20-014 |
| 31 | 1 | 12" A/S Filter Frame | 25-204-10-385 |
| 32 | 1 | 12" A/S Filter Cloth | 25-712-10-032 |
| 33 | 1 | K4 Microfibre Bag | 25-712-10-008 |
| 34 | 1 | KAV18H Can Assembly | 25-204-20-928 |
| 35 | 2 | M5 x 20 Pan Pozi S/Steel Screw | 25-215-10-145 |
| 36 | 2 | M5 x 16 Pan Pozi S/Steel Screw | 25-215-10-144 |
| 37 | 1 | Hose Entry Spigot Outer A/S | 25-204-10-255 |
| 38 | 1 | Spigot Retainer for KAV | 25-204-10-253 |
| 39 | 1 | KAV S/Steel Deflector | 25-204-20-187 |
| 40 | 1 | ATEX/UKEX Category 2 Black on Yellow Label | 25-216-10-059 |
| 41 | 1 | Zone 1/21 Warning Label | 25-216-10-063 |
| 42 | 1 | A/S Blanking Cap and Strap | 25-204-20-182 |
| 43 | 3 | Clip for Max, Prima, KV5, 10, 15 & 18 | 25-215-20-004 |
| 44 | 1 | Type H Warning Label Red/White Foil | 25-216-10-067 (Foil Black) |
| 45 | 1 | Kerstar Red/Silver Label | 25-216-10-094 |
| 46 | 1 | KAV18 Caddy Assembly S/Steel (with A/S Wheels and Castors) | 25-204-20-109 |
| 47 | 1 | 75mm A/S Castor Unbraked | 25-215-10-016 |
| 48 | 1 | 75mm A/S Castor Braked | 25-204-10-1426 |
| 49 | 2 | 200mm A/S Wheel | 25-215-10-474 |
| 50 | 1 | KAV/KEVA (18, 30 and 45) Hose and Accessory Basket | 25-204-10-351 |

[a] A/S = Anti-static / Conductive

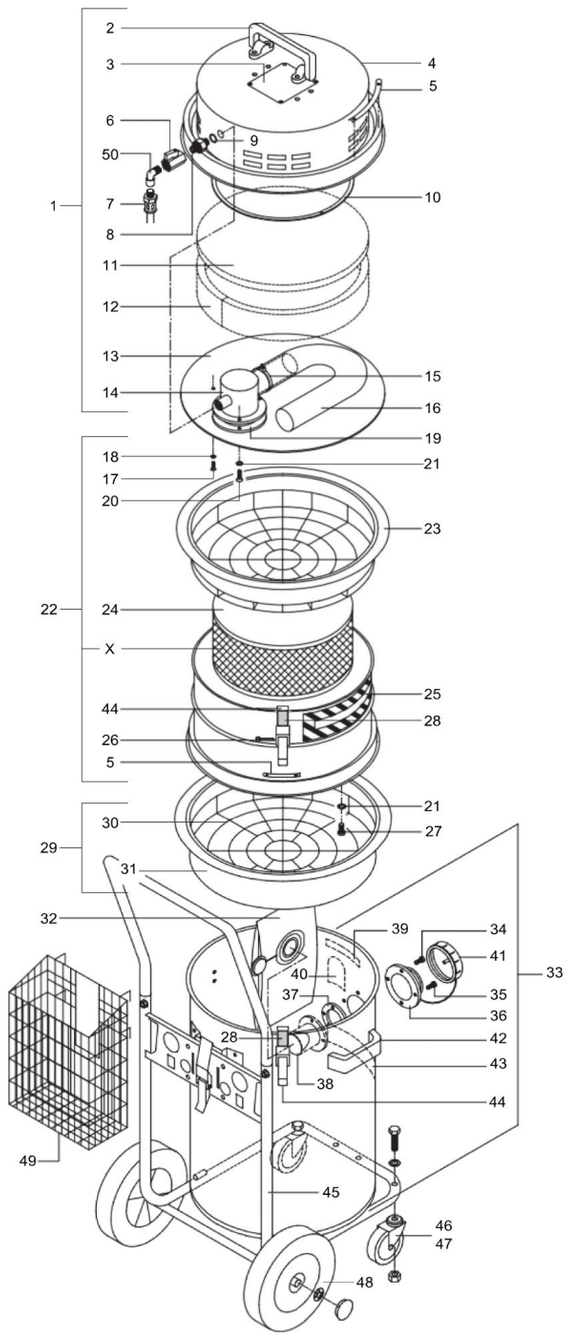



[a]·A/S = Anti-static / Conductive

## Table 4. Spare Parts for KAV 20H

| Item | Quantity | Description | Part Number |
|---|---|---|---|
| 1 | 1 | KAV 20H Motor Head and Air Supply Hose | 25-204-20-846 |
| 2 | 1 | A/S[a] Flip Flop Handle Assembly | 25-215-10-068 |
| 3 | 1 | KAV 15-45H Rating Plate | 25-216-10-028 |
| 4 | 1 | KAV 20-45 Top Pressing | 25-852-10-026 |
| 5 | 2 | Earth Strip Curved | 25-204-10-531 |
| 6 | 1 | Ball Valve | 25-215-10-072 |
| 7 | 1 | Air Supply Hose A/S 5 Metre | 25-204-10-490 |
| 8 | 1 | 1/4 BSP Male to Male Nipple | 25-204-10-1607 |
| 9 | 2 | Soft Metal Washer | 25-215-10-074 |
| 10 | 1 | 850 x 4 x 6mm Foam Rubber Seal | 25-325-10-026 |
| 11 | 1 | Foam Silencing KAV 20-45 Top | 25-320-10-030 |
| 12 | 1 | Foam Silencing KAV 15-45 Side | 25-320-10-031 |
| 13 | 1 | KAV 20-45 Motor Plate | 25-204-10-530 |
| 14 | 1 | Air Motor | 25-217-10-056 |
| 15 | 1 | Tyrap for Sound Attention Hose | 25-215-10-075 |
| 16 | 1 | 500 x 40mm Sound Attenuation Hose | 25-320-10-006 |
| 17 | 4 | M4 x 12 Pan Pozi Screw | 25-215-10-094 |
| 18 | 4 | M4 Shakeproof Washer | 25-215-10-102 |
| 19 | 1 | Gasket for Air Motor | 25-325-10-027 |
| 20 | 3 | M5 x 16 Pan Pozi Screw | 25-215-10-124 |
| 21 | 9 | M5 Shakeproof Washer | 25-215-10-150 |
| 22 | 1 | KAV 20, 30 and 45H HEPA Filter Assembly | 25-712-20-056 |
| 23 | 1 | 14" A/S Sealing Ring and Frame | 25-325-20-004 |
| 24 | 1 | KAV/KEVA20, 30 & 45H HEPA Filter | 25-712-10-067 |
| 25 | 1 | Type H Warning Plate Red/White | 25-216-10-067 |
| 26 | 2 | Split Pin | N/A |
| 27 | 6 | M5 x 6 Pan Pozi Screw | 25-215-10-121 |
| 28 | 2 | Clip Here Yellow Label 23 x 34mm | 25-216-10-056 |
| 29 | 1 | 14" A/S Filter Assembly | 25-712-20-015 |
| 30 | 1 | 14" A/S Filter Frame | 25-204-10-387 |
| 31 | 1 | 14" A/S Filter Cloth | 25-712-10-033 |
| 32 | 1 | K4 Microfibre Bag | 25-712-10-008 |
| 33 | 1 | KAV20H Can Assembly | 25-204-20-946 |
| 34 | 2 | M5 x 20 Pan Pozi S/Steel Screw | 25-215-10-145 |
| 35 | 2 | M5 x 16 Pan Pozi S/Steel Screw | 25-215-10-144 |
| 36 | 1 | Hose Entry Spigot Outer A/S | 25-204-10-255 |
| 37 | 1 | Spigot Retainer for KAV | 25-204-10-253 |
| 38 | 1 | KAV S/Steel Deflector | 25-204-20-187 |
| 39 | 1 | ATEX/UKEX Category 2 Black on Yellow Label | 25-216-10-059 |
| 40 | 1 | Zone 1/21 Warning Label | 25-216-10-063 |
| 41 | 1 | A/S Blanking Cap and Strap | 25-204-20-182 |
| 42 | 2 | A/S Curved Surface Handle with Screws and Washers | 25-215-10-528 |
| 43 | 1 | Kerstar Red/Silver Label | 25-216-10-094 |
| 44 | 4 | KV20-110 Clip for Metal Head | 25-215-10-031 |
| 45 | 1 | KAV/KEVA 20 A/S Chassis (No Castors) | 25-204-20-1080 |
| 46 | 3 | 75mm A/S Castor Unbraked | 25-215-10-016 |
| 47 | 1 | 75mm A/S Castor Braked | 25-204-10-1426 |

[a]·A/S = Anti-static / Conductive

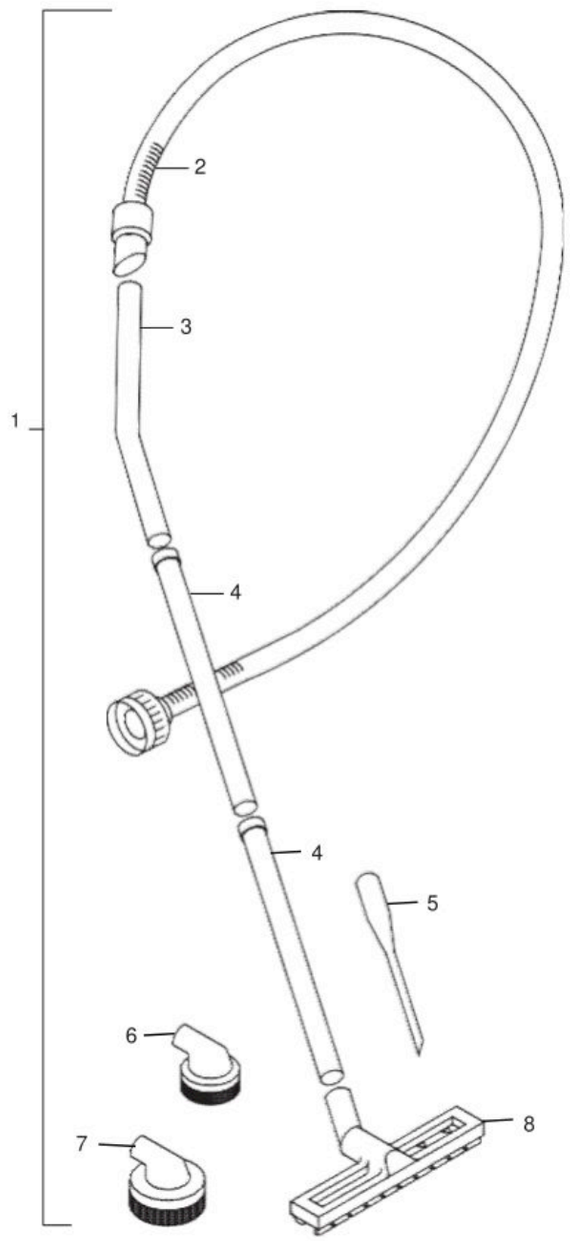



[a]·A/S = Anti-static / Conductive

## Table 5. Spare Parts for KAV 30H and 45H

| Item | Quantity | Description | Part Number |
|---|---|---|---|
| 1 | 1 | Motor Head and Air Supply Hose | 25-204-20-858 (30H) / 25-204-20-870 (45H) |
| 2 | 1 | A/S[a] Flip Flop Handle Assembly | 25-215-10-068 |
| 3 | 1 | KAV 15-45H Rating Plate | 25-216-10-028 |
| 4 | 1 | KAV 20-45 Top Pressing | 25-852-10-026 |
| 5 | 2 | Earth Strip Curved | 25-204-10-531 |
| 6 | 1 | Ball Valve | 25-215-10-072 |
| 7 | 1 | Air Supply Hose A/S 5 Metre | 25-204-10-490 |
| 8 | 1 | 1/4 BSP Male to Male Nipple | 25-204-10-1607 |
| 9 | 2 | Soft Metal Washer | 25-215-10-074 |
| 10 | 1 | 850 x 4 x 6mm Foam Rubber Seal | 25-325-10-026 |
| 11 | 1 | Foam Silencing KAV 20-45 Top | 25-320-10-030 |
| 12 | 1 | Foam Silencing KAV 15-45 Side | 25-320-10-031 |
| 13 | 1 | KAV 20-45 Motor Plate | 25-204-10-530 |
| 14 | 1 | Air Motor | 25-217-10-056 |
| 15 | 1 | Tyrap for Sound Attention Hose | 25-215-10-075 |
| 16 | 1 | 500 x 40mm Sound Attention Hose | 25-320-10-006 |
| 17 | 4 | M4 x 12 Pan Pozi Screw | 25-215-10-094 |
| 18 | 4 | M4 Shakeproof Washer | 25-215-10-102 |
| 19 | 1 | Gasket for Air Motor | 25-325-10-027 |
| 20 | 3 | M5 x 16 Pan Pozi Screw | 25-215-10-124 |
| 21 | 9 | M5 Shakeproof Washer | 25-215-10-150 |
| 22 | 1 | KAV 20, 30 and 45H HEPA Filter Assembly / "" Without HEPA Filter | 25-712-20-056 / 25-712-20-051 |
| 23 | 1 | 14" A/S Sealing Ring and Frame | 25-325-20-004 |
| 24 | 1 | KAV/KEVA20, 30 & 45H HEPA Filter | 25-712-10-067 |
| 25 | 1 | Type H Warning Plate Red/White | 25-216-10-067 |
| 26 | 2 | Split Pin | N/A |
| 27 | 6 | M5 x 6 Pan Pozi Screw | 25-215-10-121 |
| 28 | 2 | Clip Here 23 x 34mm Black on Yellow Label | 25-216-10-056 |
| 29 | 1 | 14" A/S Filter Assembly | 25-712-20-015 |
| 30 | 1 | 14" A/S Filter Frame | 25-204-10-387 |
| 31 | 1 | 14" A/S Filter Cloth | 25-712-10-033 |
| 32 | 1 | K4 Microfibre Bag | 25-712-10-008 |
| 33 | 1 | KAV30H Can Assembly<br>KAV45H Can | 25-204-20-970<br>25-204-20-1011 |
| 34 | 2 | M5 x 20 Pan Pozi S/Steel Screw | 25-215-10-145 |
| 35 | 2 | M5 x 16 Pan Pozi S/Steel Screw | 25-215-10-144 |
| 36 | 1 | Hose Entry Spigot Outer A/S | 25-204-10-255 |
| 37 | 1 | Spigot Retainer | 25-204-10-253 |
| 38 | 1 | S/Steel Deflector | 25-204-20-187 |
| 39 | 1 | ATEX/UKEX Category 2 Black on Yellow Label | 25-216-10-059 |
| 40 | 1 | Zone 1/21 Warning Label | 25-216-10-063 |
| 41 | 1 | A/S Blanking Cap and Strap | 25-204-20-182 |
| 42 | 2 | A/S Curved Surface Handle | 25-215-10-528 |
| 43 | 1 | Kerstar Red/Silver Label | 25-216-10-094 |
| 44 | 4 | KV20-110 Clip for Metal Head | 25-215-10-031 |
| 45 | 1 | KAV/KEVA 30 and 45 Caddy Assembly S/Steel (with A/S Wheels and Castors) | 25-204-20-1098 |
| 46 | 1 | 75mm A/S Castor Unbraked | 25-215-10-016 |
| 47 | 1 | 75mm A/S Castor Braked | 25-204-10-1426 |
| 48 | 2 | 200mm A/S Wheel | 25-215-10-474 |
| 49 | 1 | KAV/KEVA Hose and Accessory Basket | 25-204-10-351 |
| 50 | 1 | 1/4" BSP Elbow Male to Female (KAV45H Only) | N/A |

[a]·A/S = Anti-static / Conductive




[a] A/S = Anti-Static / Conductive

## Table 6. Spare Parts for the KAV Type H Tool Kit

| Item | Quantity | Part Number | Description |
|---|---|---|---|
| 1 | 1 | 25-132-30-037 | 38mm D1 A/S[a] Tool Kit (Items 2-8) |
| 2 | 1 | 25-204-20-079 | 38mm x 3m A/S Hose Assembly |
| 3 | 1 | 25-204-10-1878 | 38mm Stainless Steel Bent Hose End |
| 4 | 2 | 25-204-10-1877 | 38mm Stainless Steel Wand |
| 5 | 1 | 25-204-10-212 (?) | 38mm Crevice Tool A/S Plastic |
| 6 | 1 | 25-204-10-1296 | 38mm x 70mm A/S Dusting Brush |
| 7 | 1 | 25-204-20-195 | 38mm x 100mm A/S Dusting Brush |
| 8 | 1 | 25-204-20-1330 | 38mm x 375mm A/S Heavy Duty Floor Tool with Brushes |

[a] A/S = Anti-Static / Conductive

# 9. EU Declaration of Conformity (Machinery)

| EC DECLARATION OF CONFORMITY | | | |
|---|---|---|---|
| **Manufacturer's name:** | Filtermist Limited | **Machinery covered by this declaration:** | |
| **Full address:** | Telford 54 Business Park,<br>Nedge Hill,<br>Telford<br>Shropshire<br>TF3 3AL | Description: | Industrial Vacuum Cleaner |
| | | Function: | To be used in a dust producing workstation environment to remove potentially hazardous dust from surface and the air |
| | | Type: | KAV Series |
| | | Model: | KAV 15,18,20,30 & 45<br>KAV 15H,18H,20H,30H & 45H<br>KAV 15WD,18WD,20WD,30WD & 45 WD |
| | | Serial No.: | Year-Unit Produced - e.g. 25 001 is the first unit made in 2025 |
| The machinery conforms to all the requirements of the Machinery Directive 2006/42/EC. | | | |
| **The following standards have been used:** | EN12100:2010, EN 60204-1:2018, EN ISO 14120:2015, EN ISO 13857:2019 | | |
| The technical file is compiled in accordance with part A of Annex VII of the Machinery Directive 2006/42/EC. | | | |
| **Person authorised to compile the technical file (based in the European Community):** | Name: | **Absolent AB** | |
| | Address: | Staplaregatan 1SE-531 40 LidköpingSweden | |
| The relevant authorised person undertakes to transmit, in response to a reasoned request by the national authorities, relevant information on the machinery. This information will be transmitted by: (email, post) | | | |
| **Person authorised to make this declaration:** | Name: | Craig Haynes | |
| | Position in company: | Head of Engineering | |
| | Signature: |  | |
| | Place of Declaration: | Filtermist International Limited, Telford 54 Business Park, Nedge Hill, Telford, Shropshire, TF3 3AL | |
| | Date of Declaration: | 21st November 2024 | |

V2

# 10. EU Declaration of Conformity (ATEX)

## EU Declaration of Conformity (DOC)

**We**

| | |
|---|---|
| Company name: | Filtermist Limited |
| Postal address: | Telford 54 Business Park, Nedge Hill |
| City | Telford |
| Postcode: | TF3 3AL |
| Telephone number: | 01952 290500 |
| E-Mail address: | sales@filtermist.com |

**Declare that this DOC is issued under the sole responsibility of the manufacturer.**

| | |
|---|---|
| Product: | Industrial Vacuum Cleaner |
| Type: | KAV Series |
| Batch: | N/A |
| Serial number: | Year-Unit Produced Count - e.g. 25 001 is the first unit made in 2025 |
| Brand Name: | Kerstar (a subsidiary of Filtermist) |

**Object of the declaration**

| | |
|---|---|
| To be used in a dust producing workstation environment to remove potentially hazardous dust from surface and the air | |

**The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:**

EMC Directive 2014/30/EC

RoHS Directive 2015/863/EU

ATEX 2014/34/EU

Ex II 2D Ex h IIIC T50°C Db

ATEX Cert No. EMT17ATEX0050X

Pressure Equipment Directive (PED) 2014/68/EU

**The following harmonised standards and technical specifications have been applied:**

**Title, Date of standard/specification:**

EN ISO 12100:2020, EN 60204-1:2018, EN ISO 14120:2015, EN ISO 13857:2020, EN IEC 60079-0, EN ISO 80079-36:2016, EN ISO 80079-37:2016, EN 1127-1:2019, EN 14491:2012, EN 61000-6-2:2019, EN 61000-6-4:2019, EN 13445-1:2021, EN 13445-2:2021, EN 13445-3:2021, EN 13445-4:2021, EN 13445-5:2021, EN 13445-6:2021

**Additional information:**

The relevant authorised person undertakes to transmit, in response to a reasoned request by the national authorities, relevant information on the machinery. This information will be transmitted by: (email, post).

**Person authorised to compile the technical file, based in the European Community is:** Absolent AB

**Address:** Staplaregatan 1, SE-531 40 Lidköping, Sweden

**Signed for and on behalf of:**

| **Place of issue** | **yyyy-mm-dd** | **Name, function, signature** |
|---|---|---|
| Filtermist Limited,<br>Telford 54 Business Park,<br>Nedge Hill, Telford, Shropshire,<br>TF3 3AL, England | 2024-01-01 | Craig Haynes<br>Head of Engineering |

# 11. EU Declaration of Conformity (NON-ATEX)

## EU Declaration of Conformity (DOC)

**We**

| | |
|---|---|
| Company name: | Filtermist Limited |
| Postal address: | Telford 54 Business Park, Nedge Hill |
| City | Telford |
| Postcode: | TF3 3AL |
| Telephone number: | 01952 290500 |
| E-Mail address: | sales@filtermist.com |

**Declare that this DOC is issued under the sole responsibility of the manufacturer.**

| | |
|---|---|
| Product: | Industrial Vacuum Cleaner |
| Type: | KAV Series |
| Batch: | N/A |
| Serial number: | Year-Unit Produced - e.g. 25 001 is the first unit made in 2025 |
| Brand Name: | Kerstar (a subsidiary of Filtermist) |

**Object of the declaration**

| | |
|---|---|
| To be used in a dust producing workstation environment to remove potentially hazardous dust from surface and the air | |

**The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:**

EMC Directive 2014/30/EC

RoHS Directive 2015/863/EU

Pressure Equipment Directive (PED) 2014/68/EU

**The following harmonised standards and technical specifications have been applied:**

**Title, Date of standard/specification:**

EN 60204-1:2018, EN ISO 14120:2015, EN ISO 13857:2020,EN 61000-6-2:2019,EN 61000-6-4:2019,EN 13445-1:2021,EN 13445-2:2021,EN 13445-3:2021,EN 13445-4:2021,EN 13445-5:2021,EN 13445-6:2021

**Additional information:**

The relevant authorised person undertakes to transmit, in response to a reasoned request by the national authorities, relevant information on the machinery. This information will be transmitted by: (email, post).

**Person authorised to compile the technical file, based in the European Community is:** Absolent AB

**Address:** Staplaregatan 1, SE-531 40 Lidköping, Sweden

**Signed for and on behalf of:**

| **Place of issue** | **yyyy-mm-dd** | **Name, function, signature** |
|---|---|---|
| Filtermist Limited,<br>Telford 54 Business Park,<br>Nedge Hill, Telford, Shropshire,<br>TF3 3AL, England | 2024-01-01 | Craig Haynes<br>Head of Engineering |

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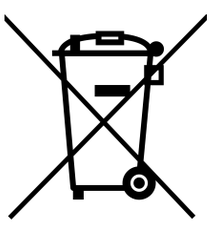

**Protecting the Environment: Disposal**

When this product has reached the end of its useful life it must be recycled in an environmentally friendly manner. It must not be disposed of with normal household waste.

This product is likely to contain or be contaminated with dust hazardous to health. It must be thoroughly decontaminated in accordance with best practice before recycling

**www.kerstar.com**

**Kerstar® products are manufactured by Filtermist Limited, based at Telford 54 Business Park, Nedge Hill, Telford, Shropshire, TF3 3AL, England.**

**(+44) 1952 290500 | sales@filtermist.com | www.filtermist.com**



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ISO 9001
ISO 14001