Dustcheck

Part of Absolent Air Care Group



| Vesvent |

Original Operating Instructions

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1. Welcome

Welcome to the user manual for your Dustcheck product! Thank you for choosing us. Original instructions are in English, all other languages are translations of this.

1.1. How to use this manual

This manual has been designed to be comprehensive, covering the Dustcheck branded **Vesvent (VVF).** Series

The following introduction provides essential information concerning safety and regulatory requirements - **please ensure that these are read and understood prior to use.** The closing pages of the manual contain customer support details, a glossary and an index to aid navigation and understanding.

Where applicable, a collection of bespoke documents (e.g., drawings, specification(s), data sheet(s), commissioning report(s)), may be provided alongside this manual - if so, please ensure that the manual is read in conjunction with them.

If in any doubt, please contact Filtermist Limited by calling (+44) (0)1952 290500 or emailing sales@filtermist.com. Please read this manual carefully before using the product and it keep it on file for future reference.

1.2. Safety

Ensure that, at all times, competent people are involved with the installation, operation and maintenance of your product - NEVER allow untrained or unauthorised personnel to handle equipment.

Prior to putting the product into service, ensure that a thorough risk assessment is carried out. All aspects of the equipment and its usage - including routine operation, emptying, cleaning, maintenance, access, control function and activation - must be assessed for health and safety risks. Protective measures, visible warnings and user training must have been implemented before operation is allowed, to reduce these risks to a safe level. The unit should only be put into service if the risk assessment confirms it is safe to do so.

Your product is specifically designed for the handling of dry dusts in air and must not be used for any other purpose - this is particularly true for combustible dusts. Any changes to the process and/or dust being handled should be assessed to ensure that no additional hazard is introduced and that control over the contaminant is not compromised. If sufficient information concerning application has not been imparted to us, there will be no statement of product or application and thus the installer/user **MUST** ensure that the equipment is suitable for purpose before putting into use.



DANGER! certain dusts are dangerous to handle (e.g., explosive, carcinogenic, toxic or statically charged in nature). The mixing of different dusts within the same extraction filter unit should only be done with the express consent of the filter unit supplier as the mixing of apparently innocuous dusts can in certain cases cause a potentially serious hazard.

Where **product discharge points** are fitted with rotary valves, screw conveyors or other powered moving parts, it may not be possible to fit guards which fulfill health and safety requirements due to restriction of product flow, specified physical parameters and the extent of our scope of supply. Wherever possible, it is recommended that guards with interlocks be introduced into the control systems such that personnel cannot gain access to a danger zone without the sources of power to the moving parts automatically being isolated.



IMPORTANT! Removable covers, bins, containers (or similar) which are re- movable without the aid of a tool, and which give access to a Danger Zone, must have safeguards providing adequate protection for the user/operator.

1.3. Regulatory Information

Your product must be used in compliance with the following regulations. COSHH and Pressure Equipment regulations apply to all products; LEV and ATEX/DSEAR regulations only apply in certain cases - see below for detail.

1.3.1 COSHH Regulations

All products must be used in accordance with **COSHH (Control of Substances Hazardous to Health)** regulations. In particular, please refer to the current **Health and Safety Executive (HSE)** guidance notes **EH40/2005 Workplace exposure limits (ISBN 9780717667031) and EH44 Dust in the workplace: General principles of protection**. These documents are available at **www.hse.gov.uk.**

As a minimum requirement under COSHH, **dust collectors must be inspected and tested at least once every 14 months** or in accordance with the schedules specified in HSE publication HSG258. Suitable records of examination, tests and subsequent repairs must be maintained and be kept available for inspection for a minimum period of five years.

1.3.2 LEV Regulations

Where your product forms part of a Local Exhaust Ventilation (LEV) system, you have additional duties to ensure that the LEV provides control over the contaminant. The LEV should be subject to a **Thorough Examination and Test (TExT)** at intervals not exceeding 14 months, though some LEVs have shorter intervals.

1.3.3 Pressure System Regulations

Where units are connected to a compressed air supply exceeding 0.5bar, the compressed air manifold has been designed and manufactured to comply with the requirements of the **Pressure Equipment (Safety) Regulations 2016** of the United Kingdom and the **Pressure Equipment Directive (2014/68/EU)** of the European Union. Please maintain pressure equipment, including the compressed air lines which connect to the compressed air header tank, in accordance with this legislation.

Compressed gas manifold(s) are supplied in accordance with the above legislation. Relevant information for safe operation is included on the nameplate attached to the manifold - please ensure that these limits are not exceeded. The presence of **N/A** in any box indicates that this specific information either need not, or must not, be given in order for manifolds in the stated category to comply with regulations. Where a test pressure is given, this may be on the basis of a sample testing routine and does not indicate that each individual manifold has been tested.

When connected to a pressure system, a reverse air dust collector is regarded as a part of that system and should be maintained and inspected as required by current legislation. A pressure relief valve will be required if the maximum operating pressure can be exceeded with the supply.

1..4 ATEX/DSEAR Regulations and Explosion Management

Explosion prevention and management is covered by European Union **ATEX Directive 2014/34/EU** and by United Kingdom **Dangerous Substances and Explosive Atmospheres Regulations (DSEAR).**

If your product is ATEX rated and/or presents a significant explosion risk, please read this information carefully - if it is not, you may proceed to the Installation section (below).

The ATEX Directives relate to all equipment intended for use in potentially explosive atmospheres. An explosive atmosphere is defined as a mixture of dangerous substances with air, under atmospheric conditions, in the form of gases, vapours, mist or dust in which, after ignition has occurred, combustion spreads to the entire unburned mixture. With regards to dust extraction, this definition generally applies to all equipment handling potentially combustible dust, gas or hybrid mixtures, or equipment located in areas where the equipment is operating within a potentially explosive atmosphere.

Regulatory Compliance - what has to be done?

The following actions should be taken to comply with ATEX and DSEAR regulations:

- All sites should be assessed for potentially explosive atmospheres and be classified into zones, which should be clearly marked.
- All equipment intended to be used within a potentially explosive atmosphere should meet all the Essential Health and Safety Requirements of the Directive before being put into service.
- The user should operate the equipment in accordance with the user instructions supplied for the equipment. In the case of our products, the quotation outlines the scope of supply and forms part of the user instructions.
- As previously mentioned, the user should carry out a risk assessment for the system to ensure that no new risks are introduced if components and assemblies are combined. Any additional items of equipment supplied by the user (out of the scope of our supply) should be risk assessed and confirmed suitable prior to putting into service. This is particularly important when considering if the items have or can generate ignition sources, or when the unit forms part of a system.



WARNING! With potentially explosive dusts it is vital that all areas, and in particular areas around any explosion vents, are dust free to minimise the risk of secondary explosion in the event of primary explosion within the equipment.

Ignition Sources

The assessment of effective ignition sources will be based upon atmospheric characteristics such as **Minimum Ignition Energy (MIE)** and layer and cloud ignition temperature. The values used for the assessment will be contained within the quotation.



IMPORTANT! Ensure that these values are in line with the actual atmosphere present.

Do not introduce novel effective ignition sources during the installation of your product or during the combining of other equipment to form an assembly. No consideration has been made for ignition sources other than those pertaining directly to your equipment.

Where flammable gas/vapours exist alongside dust that has a high electrical resistivity cone, discharges can occur in bulk material (e.g., in the collection bin or hopper). In most such cases, the equipment is provided with some form of explosion protection and the filter unit is supplied with a product discharge option (e.g., bin or rotary valve). Where a rotary valve or screw conveyor is used on the discharge, ensure no metal pieces can enter the collector and get trapped leading to heat spots.

If a unit does not include any product discharge we generally do not supply explosion protection - in these instances a risk assessment should be carried out to determine if explosion protection is required and if so ensure that this is fitted. Certain potential ignition sources (e.g., stray electrical currents, ultrasonics, lightning) are site specific and should be risk assessed prior to installation. Always ensure that any electrical wiring used is suitable for the product classification.



IMPORTANT! Some materials can exhibit exothermic reactions including self-ignition of dusts. If the materials handled exhibit these characteristics, frequently remove collected material from the bin to avoid this becoming an effective ignition source.

Temperature Range

The operating temperature of the equipment can have a bearing on the specification. As such, it is important that the equipment is not operated in applications where the operating temperature is outside the range for which the equipment is specified.

Explosion Protection

There is no direct explosion protection, but connected systems should be vented in line with your risk assessment.

General

In accordance with legislation, any dust collector or collection system handling potentially explosive product(s) should be fitted with explosion relief and/or suppression or be capable of explosion containment.

Units fitted with explosion relief must always be adequately secured / bolted down to prevent overturning during an explosion. National Building Specification (NBS) regulation BS EN 14491:2012 Dust Explosion Venting Protective Systems provides guidance on the forces generated during an explosion to aid this securing. Equipment that is in compliance with the relevant ATEX directive will have clear markings indicating the category classification of the equipment. Only operate the equipment in areas it is suitable for.

Where explosion protection is incorporated into the equipment or vessel the filter unit is coupled to, you should ensure that the explosion pressure generated does not exceed the strength of the equipment. Explosion venting panels, where fitted, have been sized according to the latest guidance accounting for atmospheric characteristics. It is essential that these characteristics are correct for the product being handled (these are detailed in the quotation).

Anti-Static Features

All metal components must be connected to a suitable and reliable earth. Where there is risk of static build up on filter media - which could lead to an electrostatic discharge capable of igniting the atmosphere - anti-static media will be selected and fitted. A suitable earth path will be present to the supplied earth boss – continued safety is only ensured by using the correct media.

TIP! It is recommended that checks for suitable earth are carried out at regular intervals.

IMPORTANT! When installing explosion prevention equipment, due consideration should be given to ensure adequate earth bonding to prevent static build up, which could create sparks that might result in the ignition of explosive mixtures of the dust and air.

The Connection of Ductwork

Explosion protection is generally not required in the ductwork. However, if an explosion occurs in the connected filter unit, flame and pressure can propagate into the ducting and travel for long distances. It is important that this effect is considered and if deemed unacceptable, a device should be installed in the ductwork to reduce or eliminate it. Ducting should be suitable for the application and selected to avoid the possibility of introducing ignition sources into the filter. Special consideration should be given to avoiding propagating discharges where painted (insulating) ducting is used - this also includes the use of flexible non-metallic hose. If metal ducting is selected it should also be connected to a suitable reliable earth.

TIP! Regular checks should be made to ensure that explosive dust is not allowed to build up in the ductwork and create concentrations within explosible limits. Where dampers are fitted, they should be adjusted slowly to avoid sparks.

Inspection and Maintenance

Equipment should be maintained in good condition and all safety features regularly inspected. Fixings and retaining devices, in particular those pertaining to items such as access doors and covers which could become dislodged in the event of an explosion, must be kept in good condition and must always be correctly replaced or refitted if removed. See the **Maintenance** section in this manual for further guidance.

2. Installation

This chapter provides information regarding the delivery, handling and installation of your product.

NOTE! When a reference is made here to "units", this can include sections of units as well as complete and fully assembled units.



2.1. Delivery

The majority of units are delivered to enable unloading by forklift. Units are loaded on pallets or skids to ease loading and unloading only - the presence of a pallet does **NOT** imply that the load will be inherently stable and suitable for forklift transportation. Indeed, great care should be taken when handling all units delivered on pallets, especially where their size/shape indicate that the centre of gravity may be high or offset from the centre line of the pallet. The unit should be lifted off the delivery vehicle and immediately lowered to the ground. If the unit is to be transported by forklift on the pallet the forks must be spread to the maximum possible width. The route taken must be over smooth, level ground and a low speed should be maintained. Lifting points for cranage may not have been included.

IMPORTANT! If a warning label regarding stability is attached to the unit this MUST NOT be ignored and should not be removed until the unit is removed from its pallet or stabilised in some other manner

Units are delivered on blocks specifically to ease loading and unloading by forklift. When using a forklift to unload be aware that the unit may have no base and/or that easily damaged items may be located within the unprotected

base. Where appropriate, extra long forks or fork extensions must be used to ensure that the base area of the unit is spanned.

2.2. Handling

All handling activities should be carried out by a competent person, in accordance with statutory regulations and any site or company-specific requirements. Do not attempt to lift a unit by other means than those recommended here.

Some of our products can be handled manually. When doing so, ensure that the correct techniques are used and if suitable hand holds are not available that handles, straps or slings are attached. The majority of units can be lifted from above, but if the unit is not fitted with lifting points you should contact us to confirm that your proposed lifting method is acceptable.

When lifting, always be aware that the cleaning valves and controller are very susceptible to damage; even a light impact which does no visible damage can cause slight deformation of a solenoid operator, which may result in non-operation. Lifting equipment can be attached directly to the bolt holes in the flanges, should they be present on your model - it maybe necessary to remove individual bolts to allow attachment.



WARNING! Do not remove more bolts than necessary and do not lift with bolts missing as this may weaken the structure.



IMPORTANT! Great care should be taken to ensure that slings cannot slip and that the manifold with cleaning valves or jet tubes are not used as a sling point.

Where a unit is to be assembled to other equipment, or where a unit is delivered in sections, ensure that the unit is positioned directly over the mating flange of the item onto which it is to be mounted and that locating rods or bars are inserted into corresponding holes in the mating flanges, down which the unit can slide as it is lowered. This ensures that a true alignment is achieved and that, if the last few centimeters are a drop rather than a controlled lowering, the stability and location of the unit is guaranteed.

2.3. Assembly

The majority of products do not have specific instructions for assembly. However, please be advised that when assembling split units or mating collectors to another plant, an appropriate sealant must be used on all joints to ensure an airtight seal adequate for the operating pressures. Two beads of sealant should be used on either side of the bolt hole (Figure 1). When assembling or disassembling split unit sections, care should be taken to ensure that the unit is re-assembled, sealed and clamped as it was originally supplied in order to maintain earthing continuity.

Furthermore, where a collector is floor mounted, it is necessary to ensure that the floor is level - otherwise the function of the bin mechanism could be adversely affected.

2.4. Compressed Air Supply

Most products require an adequate supply of clean, dry and oil free compressed air: contaminated air will cause malfunction and reduce the lifespan of the filter media. The supply pipe should be **1/2" nominal bore (N.B.)** as a minimum, but a **3/4" N.B**. is recommended for long pipe runs.

The maximum manifold operating pressure is indicated on the nameplate attached to the manifold, if one is included - **please ensure that this is not exceeded**. The compressed air supply should be suitable for the requirements. Always provide a means of isolating and discharging the stored pressure from the manifold to assist maintenance.

NOTE! We recommend the fitting of a moisture separator with a line filter and regulator immediately prior to the manifold. Such a device must be capable of ensuring that the manifold maximum pressure is not exceeded; it must also be capable of isolating the compressed air supply and draining the pressure from the cleaning system to facilitate maintenance.

The compressed air manifold has been designed and manufactured to the operating limits of temperature and pressure as stated on the manifold data plate. The limits of temperature, especially the upper limit, are specific to the manifold fabrication and do not imply that all other components associated with the manifold or dust collector are capable of operating at such temperatures. If a unit is to be utilised in an operating temperature range other than that for which it was originally intended please contact us to ascertain suitability.

Table 1. Compressed Air Supply Technical Data, by Model

Model	Consumption (Free Air Delivered)	Pulse Interval	Pulse Duration	Operating (Maximum) Pressure
Vesvent (Vessel Venting Series, VVF)	1.9 m3/hr	30 Seconds	100 Milliseconds	6.0 bar g

3. Filter Cartridge Removal and Installation

This chapter provides product-specific procedures for installing filter cartridges. Please locate the relevant cartridge procedure(s) for your product and ignore all others - **ensure that you consult the correct procedure for your model**. Always wear appropriate PPE when replacing cartridges.

IMPORTANT! In line with clause 7.11 of EN50335-2-69, please follow these installation instructions to ensure safe installation of the machine.

3.1. Vesvent Series

Follow this procedure to install cartridges in a **VVF / Vesvent series** model filter. All electrical and pneumatic connections supplied to the filter unit should be flexible or disconnectable to allow the clean section of the unit - with the cartridges attached - to be lifted free of the dirty chamber to enable cartridge replacement. To replace the cartridges, follow this procedure:

1. Unlock the clamping ring connection from the top of the cone section.
2. Remove the clamp, leaving the seal attached to the cone.
3. Unscrew the old cartridge from the adaptor in an anti-clockwise direction.
4. Check the new filter cartridge for damage and insert carefully into filter body - screw onto the adaptor in a clockwise direction.
5. Replace the cone section, ensuring the seal is in good condition and secure clamping ring.

IMPORTANT! Do not overtighten the screw in step 4. as this can damage the element and result in leakage.

4. Electrical Information

To ensure the safety of personnel and the integrity of the equipment, it is mandatory to refer to the manufacturer's wiring diagrams and operating instructions for each electrical component prior to and during the installation process. All work must be executed in strict accordance with local electrical guidelines and laws to maintain regulatory compliance and operational warranty. Failure to follow the specific schematics and safety protocols provided by the manufacturer may result in hazardous malfunctions or system failure.

WARNING! ALL ELECTRICAL INSTALLATION AND MAINTENANCE WORK MUST BE CARRIED OUT BY A COMPETENT ELECTRICAL PROFESSIONAL.

4.1. Antistatic Medias and Earthing

Antistatic cartridges will have an earth path built into the cartridge and through the fixings to the filter plate. Your unit will be provided with an earth point - this should be connected to a suitable earth to prevent the build-up of high static charges, which may lead to discharges and possible ignition sources to explosive atmospheres.

Filter bags are connected to earth through the media, making contact with the cages and filter plate - this also requires the earth connection on the unit to be connected to a suitable earth.

All units fitted with antistatic medias should be appropriately earthed/grounded otherwise the antistatic properties may be negated.

TIP! Regular checks should be made to ensure the path to earth has not deteriorated.

IMPORTANT! Unless the specification of the process has been changed meaning it is no longer necessary for antistatic media to be used, it is extremely important to ensure that replacement elements are correctly specified and contain antistatic media.

IMPORTANT! When fitting new antistatic elements, ensure that prior to installation the contact surfaces are clean and have not become contaminated or oxidised to such an extent that a good path of continuity cannot be ensured.

4.2. Installation and Maintenance Rules for Controllers

The following general rules of installation and maintenance for cleaning relate to all controllers whose functions and readings are detailed subsequently.

IMPORTANT! The controller, as supplied, complies with the Electro-Magnetic Compatibility (EMC) directive 2014/30/EU. In order to retain compliance, an electrical supply where the neutral is NOT earth bonded is required. Failure to do this may result in the loss of compliance.

Firstly, when installing your cleaning controller, please ensure that:

- The device is shielded against direct sun exposure. Ensure that the controller is not installed in the proximity of, or in direct contact with, any source(s) of heat or electromagnetic field(s).
- The device is fixed on the wall at a minimum of 60cm above the floor.
- The device is connected on a supply line other than those used for motor drives or other devices that may cause noise on the net.

If maintenance is to be carried out on your device or filter, please ensure that:

- The supply voltage to the device is isolated.
- Before acting on the device for any operation, you check for safe conditions. For any electrical operation(s), always isolate the power supply to the controller and wait 30 seconds for the internal capacitor to discharge before opening. At the end of the operation(s), close the device to retain the protection degree before restoring power to the unit.
- In the case of any fault that does not include the fuse, switch the supply voltage off immediately and contact the supplier - it is recommended that the timer should be recalibrated by a Filtermist engineer prior to reconnection.

Once a month or more frequently, it is necessary to verify if there is any dust on the enclosure and to remove it if it is present. Dust egress must be avoided inside the equipment through the pneumatic connections for the reading of the dP - ensure these lines are equipped with an effective dust mitigation system.

Do not add other holes on the enclosure of the timer. In case of application of cable glands by the final user, Filtermist Limited does not assume any responsibility. Use only cable glands **IP65 ATEX** certified type **BS EN 60529:1992+A2:2013.** The fixing holes must be made with the right diameter indicator for that cable gland. Generally, any modification by a non-Filtermist engineer may invalidate any ATEX certification.

IMPORTANT! With output voltage 230V AC we advise you to use connectors with RC filter.

4.2.1. E1T/E2T Controller

Operating details for the E1T/E2T controllers are provided below.

E1T Controller Operation Manual

Please refer to the accompanying manual, alternatively, visit the following website for the online version - https://www.turbocontrols.eu/wp-content/uploads/2018/10/Seqn.re-E1T-16-C.-24-Vdc-R1.24-Man.-Op.-En.pdf

E2T Controller Operation Manual

Please refer to the accompanying manual, alternatively, visit the following website for the online version – https://www.turbocontrols.eu/wp-content/uploads/2018/10/Econ.re-E2T-16-C.-24-Vdc-R1.25-Man.-Op.-En.pdf

5. Commissioning

The following commissioning instructions are in line with clause 7.11 of EN60335-2-69. To commission your product, first check that all packaging and protection materials - such as remote controls taped inside the unit, etc. - are removed prior to start up.

Once these checks have been completed, ensure that the following steps are completed to commission your unit:

- Check that all connections have been correctly made and that the appropriate power sources are available.



WARNING! DO NOT plug, or make connections to, the solenoid valve vent ports as this may inhibit the operation of the valves.



NOTE! Unless otherwise specified, the cleaning control and manifold have been tested to be fully functional on despatch from our works. With the exception of power supply to the controller and fan (if fitted) along with a compressed air supply to the manifold, no other connections are required.

- Check all control functions.
- Ensure all cartridges are correctly fitted.
- Ensure all access doors are sealed.
- Where fans are fitted; adjust the system airflow to the design duty and take static pressure readings, as a basis point for reference and future Thorough Examination and Tests (TExTs). If applicable, reduce the airflow as described in Air Volumes.



WARNING! It is IMPERATIVE that the unit is installed and adjusted to ensure that the stated airflow is not exceeded - excessive air volumes can seriously affect filtration efficiency and element life.

6. Maintenance & Troubleshooting

This chapter provides information pertaining to the maintenance of your product, including inspection and trouble-shooting steps.

Maintenance should be carried out by adequately trained personnel, wearing appropriate PPE. Prior to commencing work, the system to which the filter is attached should be non-operational; all sources of energy must be isolated and locked off; and any compressed air retained in the cleaning system must be drained.

Filtermist Limited offer Service and Maintenance Agreements which ensure that the statutory requirements of inspection and testing are met, with appropriate records. Please contact our team for further information if this may interest you: by telephone on **(0)1952 290500** or by email at **sales@filtermist.com.**

WARNING! DO NOT under any circumstances attempt to work in conditions where appropriate working platforms and access have not been erected, or where personal safety equipment appropriate to the task in hand is not available.

IMPORTANT! When accessing the top of the machine for maintenance and/or planned inspections, due consideration should be given to for working at height, in line with your risk assessment

IMPORTANT! If power tools are required to remove solidified sludge, suitable hearing protection must be worn

IMPORTANT! The operator should take care when carrying out maintenance on this machine and mitigate or eliminate any risks in accordance with clause 7.11 of EN60335-2-69

DANGER! Manifolds MUST NEVER be tested with cleaning valves and other equipment fitted. The manifold must be stripped and blanking plates fitted prior to testing.

6.1. Inspections

6.1.1 Routine Inspection

The following routine inspections should be performed no later than every six months from the date of first operation / in line with your internal risk assessment, whichever is shorter. Specific industries and applications may require more frequent inspection. Inspect the clean air compartment.

- Inspect the clean air compartment.
- Check filter cartridges, filter clamps and seals.
- Test cleaning cycle of reverse air systems and mechanisms.
- Measure and record (a) system airflow volume, (b) pressure differential and (c) static pressure. Record controller settings.
- Check fans and motors (where fitted).
- Check doors, cover, and collection bin seals and clamping (where fitted).
- Inspect explosion panels and weather covers (where fitted). The inspection is now complete - tighten the access door (where fitted) securing nuts.

IMPORTANT! Do not overtighten access door securing nuts, max torque 22Nm.

6.1.2 Inspection of Compressed Air Equipment

The manifold assembly should be routinely inspected at the same interval as stated in 8.1.1 together with all associated pressure equipment on site; relevant information for their safe operation and inspection is included on the attached nameplate.

Inspection is normally visual, to make an assessment of any effects of corrosion. Should it be decided that a manifold requires pressure testing this must be carried out hydrostatically in accordance with the original specification.



DANGER! Manifolds MUST NEVER be tested with cleaning valves and other equipment fitted. The manifold must be stripped and blanking plates fitted prior to testing.

6.1.3 Inspection of Silencer Housings and Acoustic Covers for Fans (Where Fitted)

Unless otherwise specified, silencer housings and acoustic covers have no maintenance requirements - however, it is considered prudent to examine the housing when any inspection of the fan is carried out. The following check points, where applicable, should be followed:

- Ensure that all insulation is well retained and has not come loose from any fixings. If it has, re-attach it.
- Ensure that the housing/cover or any component parts do not impede cooling air supply to the fan motor. Make corrections where necessary.
- Ensure that, if the enclosure is fitted with a separate air circulation or cooling fan, this fan is operating whenever the main fan is running or (if thermostatically controlled) that the controls function correctly.
- Ensure that no mechanical damage has occurred which may affect the performance of the housing.

6.2. Cleaning Explosion Relief Valve (Where Fitted)

Certain products are fitted with an explosion relief valve. If activated, this valve will automatically re-set. However, powder will almost certainly get into the chamber behind the valve plate and on to the main seal - if it gets trapped on the seal then the valve is likely to leak. To clean the valve:

1. Remove the valve assembly from the vessel. Do not dismantle parts of the valve - it must come down as a whole
2. Using compressed air, blow between the fins until all traces of powder have been removed.
3. The valve plate must now be opened. To do this, you must first remove the switch actuating pin in the centre of the valve (if one is fitted).
4. In the centre hole you will see a nut welded to the backside of the valve plate (M8 to M16, dependant on the valve size). Take a length of threaded rod matching the nut, which is long enough to protrude beyond the case of the valve by 100mm. Insert the rod until it bottoms.
5. Use a length of flat plate approximately 200mm long, or an oversized washer with a clearance hole to suit the threaded rod that will straddle the centre hole in the valve.
6. Slip the plate or washer over the rod and screw on a nut until it bottoms out.
7. Turn the nut and the valve plate will start to open.
8. Keep turning until there is an approximately 25mm clearance between the valve plate and its seat.
9. You will now be able to gain access to the main "O" ring seal located in the valve seat.
10. Clean the "O" ring using soapy water; do not use chemicals or solvents.
11. Release the nut and the valve plate will close. Remove the plate or washer and threaded rod.
12. Replace the switch actuator pin and return the valve to the vessel. Cleaning is complete.

6.3. Troubleshooting

If issues with your product occur, consider the following causes prior to calling for a service.

Table 2. Troubleshooting

Fault	Potential Cause
Filter Elements Not Cleaning	Check that the compressed air supply is turned on and that the pressure is as specified. Ensure that filter elements are contaminant free.
	Check that the controller is operating correctly.
	Check the solenoid valve operation.
	Check that the solenoid valve vent ports have not been obstructed or plugged - if they are, clean them out.
	Check diaphragm valve operation.
Dust Deposits On Clean Side	Check filter media for damage - replace damaged media if so.
	Check all seals for damage - repair or replace seals as necessary.
	Check filter element location - correct, if required.
High Differential Pressure	Check cleaning cycle - adjust, if necessary.
	Check that design air volume is not being exceeded - if so, reduce the air volume.
Low Differential Pressure	Check filter media for damage - replace damaged media if so.
	Check your cleaning cycle routine - frequent cleaning cycles may cause low differential pressure. If so, reduce the number of cycles you place the unit through.
	Check for correct fan rotation - alter, if necessary.

6.4. Spare and Replacement Parts

If you require spare or replacement parts for your product, please contact us: sales@filtermist.com or (0)1952 290500.

When ordering replacement or spare parts, or requesting information regarding performance of application, please specify the serial number(s) of the dust collector(s).

7. Declaration of Conformity

<table>
<tr><td colspan="3">EC DECLARATION OF CONFORMITY</td><td colspan="2">FILTERMIST</td></tr>
<tr><td>Manufacturer's name:</td><td>Filtermist Limited</td><td colspan="3">Machinery covered by this declaration:</td></tr>
<tr><td rowspan="3">Full address:</td><td rowspan="3">Telford 54 Business Park,
Nedge Hill,
Telford
Shropshire
TF3 3AL</td><td>Description:</td><td colspan="2">Dust Collector Unit</td></tr>
<tr><td>Function:</td><td colspan="2">The extraction, separation, and filtration of airborne dust, particulates, or fumes from an industrial process stream to ensure clean air discharge</td></tr>
<tr><td>Type:</td><td colspan="2">Vesvent Series</td></tr>
<tr><td></td><td></td><td>Model:</td><td colspan="2">VVF1-0.5-03,VVF1-3.5-10,VVF1-1-06,VVF1-0.3-02,VVF1-1.6-10 & VVF1-1-06</td></tr>
<tr><td></td><td></td><td>Serial No.:</td><td colspan="2">See unit</td></tr>
<tr><td colspan="5">The machinery conforms to all the requirements of the Machinery Directive 2006/42/EC.</td></tr>
<tr><td colspan="2">The following standards have been used:</td><td colspan="3">EN12100:2010, EN 60204-1:2018, EN ISO 14120:2015, EN ISO 13857:2019</td></tr>
<tr><td colspan="5">The technical file is compiled in accordance with part A of Annex VII of the Machinery Directive 2006/42/EC.</td></tr>
<tr><td colspan="2" rowspan="2">Person authorised to compile the technical file (based in the European Community):</td><td>Name:</td><td colspan="2">Absolent AB</td></tr>
<tr><td>Address:</td><td colspan="2">Staplaregatan 1SE-531 40 LidköpingSweden</td></tr>
<tr><td colspan="5">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)</td></tr>
<tr><td colspan="2" rowspan="5">Person authorised to make this declaration:</td><td>Name:</td><td colspan="2">Mark Newman</td></tr>
<tr><td>Position in company:</td><td colspan="2">Operations Director</td></tr>
<tr><td>Signature:</td><td colspan="2"></td></tr>
<tr><td>Place of Declaration:</td><td colspan="2">Filtermist Limited, Telford 54 Business Park, Nedge Hill, Telford, Shropshire, TF3 3AL</td></tr>
<tr><td>Date of Declaration:</td><td colspan="2">1st June 2026</td></tr>
</table>

V2

Only valid if your unit was quoted & produced as an ATEX compliant unit, which also includes a manifold

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: Dust Collector Unit
Type: Vesvent Series
Batch: N/A
Serial number: All Dustcheck products with 5-digit serial numbers starting from 00001, as per the data plate
Brand Name: Dustcheck (a subsidiary of Filtermist)

Object of the declaration

To fit to machinery to extract industrial dust & filter to 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

Internal Ex II 2/3D Ex h IIIB T125°C Db/Dc
External Ex II 3D Ex h IIIB T125°C Dc

Atex Certificate No. CML 20ATEXT308

Pressure Equipment Directive 2014/68/EU

The following harmonised standards and technical specifications have been applied:

Title, Date of standard/specification:

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, EN IEC 63000:2018

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, Telford 54 Business Park, Nedge Hill, Telford, Shropshire, TF3 3AL, England	2026-06-01	Mark Newman Operations Director



Only valid if your unit was quoted & produced as an ATEX compliant unit, which does not include a manifold

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.

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Internal Ex II 2/3D Ex h IIIB T125°C Db/Dc
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Atex Certificate No. CML 20ATEXT308

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Additional information:

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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, Telford 54 Business Park, Nedge Hill, Telford, Shropshire, TF3 3AL, England	2026-06-01	Mark Newman Operations Director



Only valid if your unit was quoted & produced as an Non-ATEX compliant unit, which also includes a manifold

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: Dust Collector Unit
Type: Vesvent Series
Batch: N/A
Serial number: All Dustcheck products with 5-digit serial numbers starting from 00001, as per the data plate
Brand Name: Dustcheck (a subsidiary of Filtermist)

Object of the declaration

To fit to machinery to extract industrial dust & filter to 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, EN IEC 63000:2018

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, Telford 54 Business Park, Nedge Hill, Telford, Shropshire, TF3 3AL, England	2026-06-01	Mark Newman Operations Director



Only valid if your unit was quoted & produced as an Non-ATEX compliant unit, which does not include a manifold

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:	Dust Collector Unit
Type:	Vesvent Series
Batch:	N/A
Serial number:	All Dustcheck products with 5-digit serial numbers starting from 00001, as per the data plate
Brand Name:	Dustcheck (a subsidiary of Filtermist)

Object of the declaration

To fit to machinery to extract industrial dust & filter to 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

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 13857:2020EN 61000-6-2:2019, EN 61000-6-4:2019, EN IEC 63000:2018

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Signed for and on behalf of:

Place of issue	**yyyy-mm-dd**	**Name, function, signature**
Filtermist Limited, Telford 54 Business Park, Nedge Hill, Telford, Shropshire, TF3 3AL, England	2026-06-01	Mark Newman Operations Director



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Supplied by:



Certificate Number 1122
ISO 9001
ISO 14001