



HUSHVENT Destratification Fans

Installation, Operation and Maintenance Manual

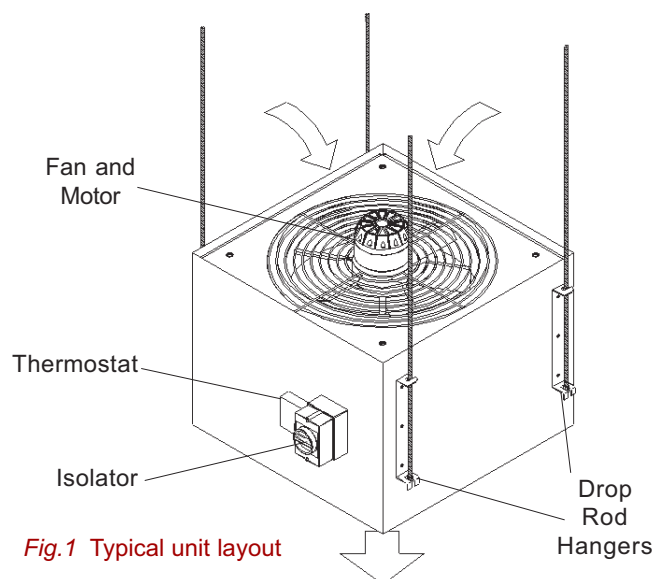


Fig.1 Typical unit layout

IMPORTANT 
 This manual must be read in full before installation, operation and maintenance of the unit/s supplied

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1 Introduction

The HUSHVENT series is a range of ceiling mounted destratification fans, with a low rate of air movement to prevent drafts in working areas and to reduce noise. Standard operating temperature of the unit is 0 to +30°C and the fans are IP54 rated, with class F insulation. Control is via a thermostat which is pre-wired and mounted to the unit.

The unit case is constructed from galvanised sheet steel with grey external powder coat paint finish to BS00A05. (other colours available on request.)

The removable outlet grille is fixed bar anodised aluminium.

For further technical details regarding dimensions and weights contact VES on **08702 404340**, quoting the sales order (SO) number and the unit type as found on the unit nameplate or visit www.ves.co.uk.

2 Receipt of Goods / Handling

Immediately upon receipt of goods check for possible damage in transit paying particular attention to the fan impeller, isolator, thermostat and grille. Prior to installation please check to ensure smooth rotation of the impeller as this could have been thrown off balance during transit. In the event of any damage having occurred or if any item is found missing, it is essential to inform VES Andover Ltd. within **7 working days** of delivery quoting sales order (SO) number and the unit type as found on the unit nameplate. After this period we will be unable to accept any claim for damaged or missing goods.

CAUTION

This unit should **NOT** be lifted by the fan plate, impeller fan guard or terminal box

When moving the unit, handle with care and in such a manner as to avoid damaging the external finish. Units are to be rigged and lifted using spreaders, taking into account the unit weight and lifting gear should be so arranged as not to bear on the casework. For further details, refer to the unit outline drawing.

3 Installation

Consideration must be given by the installer to the positioning of the unit to ensure that access for maintenance can be provided, in line with Health and Safety and Building Regulations. Adequate illumination of the units location must also be considered in order to carry out maintenance safely.

WARNING

Only experienced fitters should undertake this work. Take necessary safety precautions when working in elevated positions

For optimum performance the units should be fixed at no more than 1.0 metre below the roof (or at eaves level in pitched roofs).

WARNING

Electrical supply must be fully isolated before attempting to affect any work on this unit.

It is the customers responsibility to supply a dedicated, isolated power supply with overload protection, to account for motor start up currents (See max current on fan spec plate)

The entire system must be considered for safety purposes and it is the responsibility of the installer to ensure that all of the equipment is installed in compliance with the manufacturer's recommendations, with due regard to the current HEALTH AND SAFETY AT WORK ACT and conforms to all relevant statutory regulations. Where a unit is installed so that a failure of components could result in injury to personnel, precautions should be taken to prevent such an injury.

WARNING

Hushvent systems should not be installed in factories where an industrial process produces fumes or dust

Positioning the units.

Ideally, the units should be mounted 1 metre below the lowest part of the roof. Even spacing of units through the heated area is required. Follow the recommendations in the table below for positioning.

Model	Ideal Mounting Height Metres	Average floor Coverage Metres ²
HV355/6	6.0	150
HV400/6	7.5	250
HV450/6	12.0	500
HV560/8	15.0	750
HV630/8	15.0	900
HV630/6	20.0	1350



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Installation *continued*

CAUTION 
Ensure that the grille is securely attached to casework after installation or maintenance

Hushvent Hanging Procedure

- Hang four drop rods from the ceiling at appropriate distances apart, matching the Hushvent foot hole centres
- Wind a nut onto each drop rod, approximately to where the top of the hushvent will lie. This will become the top securing nut. See fig.3(a.i)
- Wind another four nuts onto each drop rod, accompanied by washers where necessary as per fig.3(a)
- Offer the Hushvent up to the drop rods, then position each of the 'mounting feet' 'bottom returns' on top of the first nut and washer arrangement. See fig.3(b)
- Slot the mounting feet top returns onto each drop rod between the top nut and washer arrangements. See fig.3(b)
- At this point, ensure that the Hushvent sits on a level plane. If not, adjust the nuts as appropriate. See Fig.3(c,d)
- Once positioned on a level plane, tighten the opposing locking nuts to secure in position. See fig.3 (c,d)
- Tighten the bottom locking nut
- The Hushvent has now been mounted securely. Setup and wiring can be performed

4 Setup

Motor and electrical details must be checked prior to connection to mains supply. All motor information can be found on the unit data sheet, supplied attached to the unit. Fans should be subject to a check that the impeller blades are not damaged and spin freely.

Hushvent units have fitted automatic on/off control which operates to an adjustable temperature setting. In addition, manual or automatic fan speed controllers are available with single or multiple units being controlled by one control unit if required.


To set the thermostat, we recommend positioning the dial at around 20°C. This will allow the thermostat to switch on the HUSHVENT fan when the air in the roof space reaches this temperature.

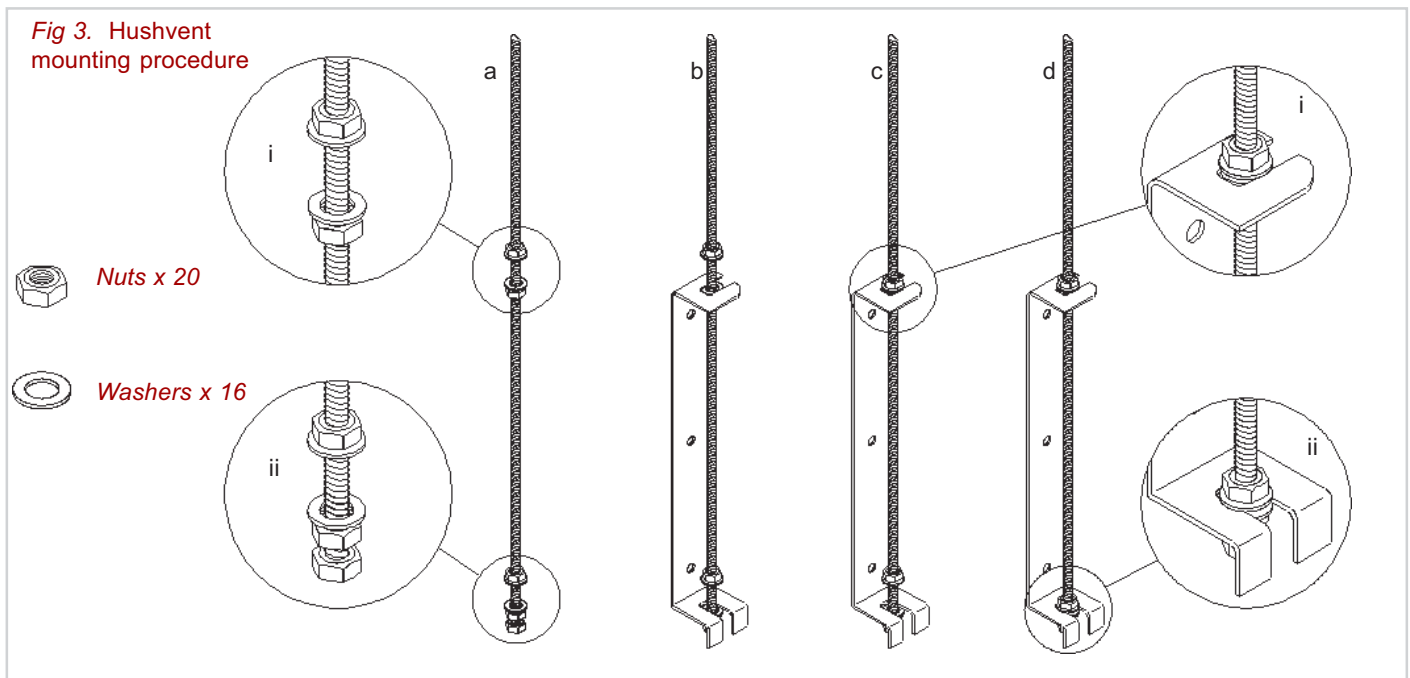
After the unit has been set up, re-check that the impeller is smooth running as this may have moved during installation.

5 Wiring

WARNING 
Electrical supply must be fully isolated before attempting to affect any work on this unit

All electrical connections must be carried out in accordance with the current edition of the I.E.E REGULATIONS and only competent Electricians should be allowed to affect any electrical work to our units.

CAUTION 
Do not connect any unit to an electrical supply voltage outside of that indicated on the fan name plate





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The fan is pre-wired to the adjustable thermostat and a local isolator.

Ensure that an appropriate cable gland for strain relief of the incoming mains power cable is used. It has been assumed that the supply cable will come in from above. Ensure that this has been sufficiently secured so as not to foul on the impeller.

The following wiring diagram details the single phase connection to the unit mounted isolator. (See Fig. 4)

If in any doubt, or for special versions of the units, consult the wiring diagram in your document pack or contact our customer services department on **08702 404340**, quoting the sales order (SO) number and unit type as found on the unit name plate.

CAUTION 
It is critical that after any maintenance work has been conducted that all components removed/replaced be refitted correctly by a competent engineer.

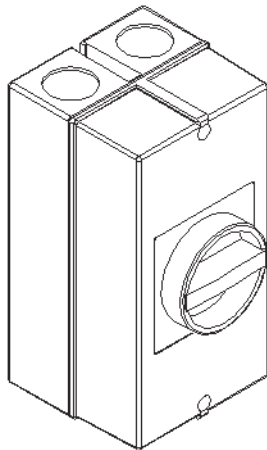
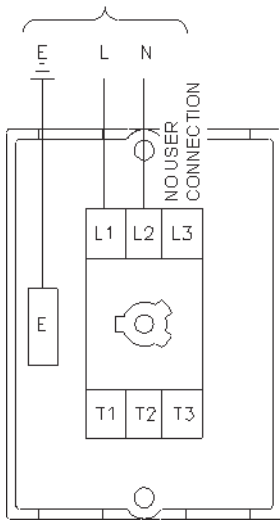
IMPORTANT 
Before attempting to carry out any work on our units, all accompanying documentation including warning labels on the unit must be referenced

WARNING 
It is essential that all electrical connections are properly made

Fig.4 Standard Electrical Details
 All motors 230V 1 phase


Model	Fan Speed (RPM)	Motor kW	FLC A
HV 355	900.00	0.10	0.44
HV 400	900.00	0.12	0.54
HV 450	900.00	0.17	0.74
HV 560	700.00	0.24	1.34
HV 630	700.00	0.28	1.47

CUSTOMER CONNECTIONS
 ELEC SUPPLY: 230V 1 PHASE 50Hz



Six Monthly Check
 Check for the tightness of nuts on mounting drop rods. The general operation of the unit should be inspected, particularly for noise from bearings, motors and fans. An irregular noise could signify that unit failure is imminent. Check for dust build-up in the system, especially around the impeller. Remove the dust if necessary. Failure to do this periodically could lead to a loss of performance or cause the fan to become out of balance, ultimately leading to bearing failure.


Annual Checks
 As above, plus:
 Check all painted surfaces to ensure that they have not deteriorated. Repaint as necessary; paint can be supplied upon request.
 Checks should be carried out for missing fasteners.

 **WEEE Directive**
 At the end of their useful life the packaging and product should be disposed of via a suitable recycling centre.
 Do not dispose of with normal household waste.
 Do not burn

When enquiring after or ordering spares, contact VES Spares Department, quoting the sales order (SO) number and unit type as found on the unit name plate.

Telephone 08702 40 43 40
Fax 08702 40 45 50

6 Maintenance

WARNING 
Before attempting to carry out any maintenance work, investigative or repair work on our units, the unit MUST BE COMPLETELY ISOLATED from its electrical supply. Ensure a minimum of two minutes after electrical disconnection before attempting to gain access to internal parts. This will allow any moving parts to come to a rest

All fan and motor bearings are supplied fully greased and lubricated. In the unlikely event of component failure, spares are available from stock at VES Andover Ltd.



PLEASE ENSURE THAT THIS DOCUMENT IS PASSED ON TO THE END USER.

We reserve the right to alter the specification without notice

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CE Declaration of Conformity

Date: 20th. May 2015
Product: Hushvent Destratification Fans
Type: HV
Manufacturer: VES Andover Limited

The product above is produced in accordance with EC Council Directives:

2004/108/EC (Electromagnetic Compatibility Directive)

2006/42/EC (Machinery Directive)


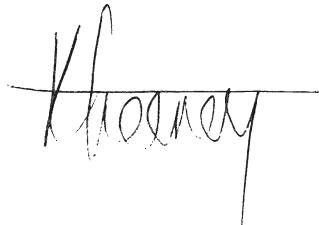
The European Harmonised Standards applied are:

BS EN ISO 12100:2010, BS EN ISO 13857:2008, EN61000, EN 60204-1, BS EN 60950-1:2006

Basis of Self attestation:

Quality Assurance to ISO 9001-2008, BSI Reg. Firm Cert. No. Q05375

Signature of Manufacturer:

Name:	Signature	Position of Signatory:
R. Peters		Deputy Managing Director
K. Feeney		Engineering Associate Director