

ROUND FAN Inline Centrifugal fans

Installation, Operation and maintenance Manual

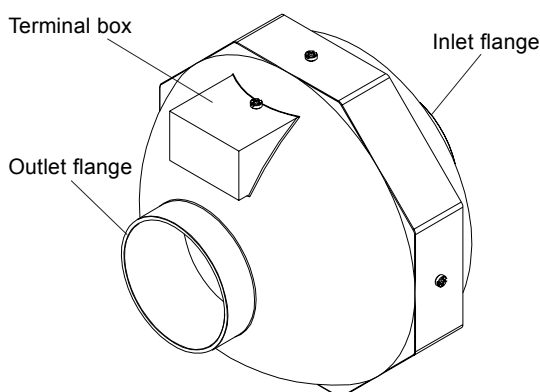





Fig. 1 Round fan detail

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

The ROUND FAN is designed to fit directly inline of a tube system. Consideration must be given by the installer for the position of the unit to ensure that access for maintenance can be provided in line with current Health and Safety and Building Regulations. Consideration must also be given by the installer for adequate illumination of the unit location in order for safe maintenance. It is recommended that the unit be held in position with padded fast clamps to reduce noise breakout and vibration. Alternative (permanent) fixings can be used but are likely to cause noise breakout and vibration, inspection and cleaning of the unit will be harder to implement. Additional support is available particularly for the larger units, by means of optional mounting feet.

IMPORTANT 
 This manual must be read in full before Installation, Operation and Maintenance of the unit/s supplied

IMPORTANT 
 Do not drill holes or drive new fixings into the fan casing

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Where provided spigots should not be used to support the ductwork and used solely as a means of ductwork connection

Round fans are available with a large range of additional extras including: silencers, filter boxes, electric heaters and screen guards.

NOTE: An electrical heater battery must be installed in accordance with the VES installation instructions ID Ref: 431. All of the components are fitted inline with the fan and ductwork.

For externally mounted units, it is essential that the casing is positioned so as to orientate the terminal box on the underside of the unit. This will ensure that surface water runs away from the terminal box and off the unit. To ensure that waterproofing is achieved by the unit silicone should be run around the join in the casing and terminal box.

1 Introduction

The ROUND FAN series is a range of inline centrifugal fans available in six sizes from 100mm to 315mm diameter, with a duty range of between 0.01m³/s and 0.38m³/s. Standard operating temperature of the unit is -30 to +40°C.

For further technical details contact VES on **08702 404340** quoting the sales order number and the unit type as found on the unit nameplate.

2 Installation


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.

Immediately upon receipt of goods, check for possible damage in transit paying particular attention to fan impellers and casework etc. Prior to installation please check to ensure smooth rotation of the impeller after transit. Also check to ensure that any ancillary items are included. These will normally be supplied fitted or in the case of small items taped to the unit.

In the event of any damage having occurred or if any item is found missing, it is essential to inform VES Andover Ltd. within **3 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.

3 Wiring

The ROUND FAN series is a range of external rotor motor tube fans, complete with a plastic casing. All electrical connections to any unit 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.

IMPORTANT 
 Do not connect any unit to an electrical supply voltage outside of that indicated on the motor nameplate

A local isolator must be fitted and mains cables should be suitably sized and terminated as shown in *fig.3*. Electrical details are shown in *fig.2* below.

Model	Motor Input (W)	FLC* (A)	Fan Speed (rpm)	Supply Voltage
RS100L	40	0.18	2030	230V 1Ph 50Hz
RS125L	70	0.31	2540	230V 1Ph 50Hz
RS150	70	0.31	2520	230V 1Ph 50Hz
RS200	120	0.52	2550	230V 1Ph 50Hz
RS250L	170	0.75	2550	230V 1Ph 50Hz
RS315	220	0.88	2450	230V 1Ph 50Hz
RS315L	280	1.20	2300	230V 1Ph 50Hz

FLC* Full Load Current

Fig.2 Electrical Details

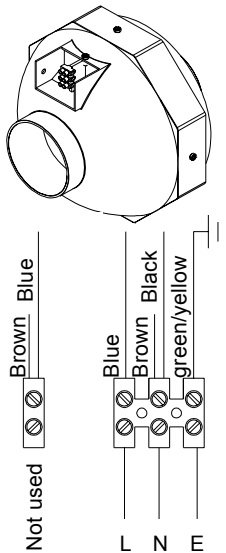
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3 Wiring continued

Standard fan wiring arrangement

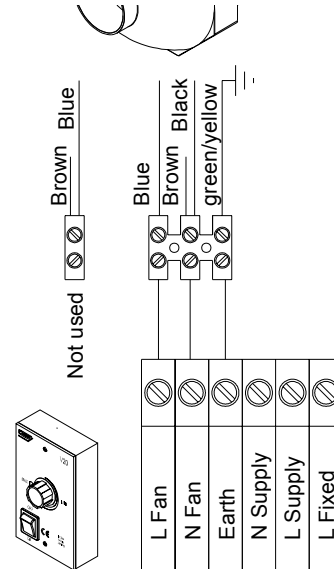
Fig.3 240v 1Ph 50Hz



Fan wiring arrangement

For optional V20 Speed Controller

Fig.4 240v 1Ph 50Hz



4 Maintenance

IMPORTANT !

Before attempting to carry out any work on our units, the unit **MUST BE COMPLETELY ISOLATED** from its electrical supply. Ensure a minimum of two minutes after electrical disconnection before commencing work. This will allow any moving part to come to a rest

In general, this series of units require very little maintenance. All fan and motor bearings are supplied fully greased and lubricated and sealed for life. In the unlikely event of component failure, spares are available from stock at VES Andover Ltd.

IMPORTANT !

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

Recommended checks

Check inside the unit for accumulation of dust, grease etc. If the fan impeller is heavily soiled, clean out carefully (ensure the unit is properly isolated). Failure to do this periodically could lead to a loss of performance or the fan to become out of balance, leading ultimately to bearing failure.

Round fans used in a supply system usually have a filter box, with a disposable filter. Every few months inspect the filters, if the filter is heavily soiled replace accordingly. To inspect or replace a filter, simply remove the filter box lid to gain access to the filter

Depending on the unit configuration: Inspect and clean if necessary electric heaters, silencers, screen guards and wall shutters. By doing so regularly performance will be maintained

To gain access to the fan for inspection, maintenance and repairs: remove padded fast clamp (or permanent fixings) from one end of the unit and carefully move the ductwork to one side and carry out maintenance. If on inspection of the unit more access is required, disconnect the unit and remove the other padded fast clamp (or permanent fixings) this will allow careful removal of the fan to carry out maintenance work.



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 nameplate.

Telephone 08702 40 43 40
Fax 08702 40 45 50



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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5 Warranty

Extended Warranties

All VES Andover Products come with a one year guarantee from date of dispatch, which covers parts and labour. You can now extend this with the following options:

Option 1. **FREE extended Warranty**

We can offer you a maintenance agreement that keeps this equipment in tip-top condition.

If you take out this agreement, we will extend the warranty **free of charge for up to 5 years**, providing the regular maintenance agreement remains in place.

Option 2. **12-24 Month Extended Warranty**

12-24 months from the date of dispatch. This can be covered at a cost of just 3% of order value. (minimum charge £50.00).

Option 3. **12-36 Month Extended Warranty**

12-36 months from date of dispatch. For this cover, the charge is 6% of order value (Minimum charge £80)

Please State which option you require when you place your order. A transferable certificate will then be issued to you. *Please note, this offer excludes condensing units. We would be happy to quote you for these separately.*

Register for separate spares reminders and get a 10% discount

Register for this free service and we will automatically send you a regular reminder detailing the consumable spares for this unit, together with their current list prices.

You will then be entitled to a 10% discount off any spares.

To arrange any of these options.

or **Phone: 023 8046 1150**
Email: spares@ves.co.uk

Stating the sales order and reference number from the unit.

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Declaration of Conformity

Date: 27th November 2002
Product: ROUND FAN Inline centrifugal Fans
Type: RS
Manufacturer: VES Andover Limited

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

98/37/EC (Machinery Directive)
89/336/EEC and amendment 92/31/EEC (Electromagnetic Compatibility Directive)
73/223/EEC and amendment 93/68/EEC (Low Voltage Directive)

The European Harmonised Standards applied are:

BS EN ISO 12100, EN 294, EN61000, EN 60204-1

The National Standards applied in particular are :

BS 848 Part 1

Basis of Self attestation:

Quality Assurance to ISO 9001-2000, BSI Reg. Firm Cert. No. Q5375

Signature of Manufacturer:

Position of Signatory:

Technical Director