

Vent-Axia®

ACM IN-LINE MIXED FLOW FANS

Installation and Wiring Instructions

- Stock Ref. N°**
171 04 010B
171 04 020D
171 05 010B
171 06 010A
171 06 020B
171 08 010A
171 10 010A
171 12 010A



SAFETY INSTRUCTIONS FOR AIR MOVING EQUIPMENT

Air moving equipment may present mechanical, electrical or noise hazards. To minimise risks associated with these potential hazards, it is essential that safety, installation, operation and maintenance instructions are followed. Implementation of these instructions should always be undertaken by a technically competent person.

Potential mechanical hazards must be eliminated by guarding against access to the rotating parts whilst the air moving equipment is operating. A range of guards are available from Vent-Axia.

Installation work, both mechanical and electrical, must be undertaken in accordance with the safety and installation instructions before switching on the fan.

Isolating the fan and its controls from the electrical supply before carrying out any maintenance work and ensuring that it can not be accidentally switched on. It is essential to ensure that rotating parts have completely stopped before commencing any work.

Air moving equipment may generate unacceptable noise levels when operating. Actual sound levels are indicated in the Vent-Axia catalogue for each product and it may be necessary to take appropriate action to reduce sound levels. A range of products are available for this purpose from Vent-Axia.

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Did you find these instructions easy to use?
 We value your comments, contact us via:

email: info@vent-axia.com

The Vent-Axia Guarantee
 Applicable only to products installed and used in the United Kingdom. For details of the guarantee outside the United Kingdom contact your local supplier.
 Vent-Axia guarantees its products for two years from the date of purchase against faulty material or workmanship. In the event of any part being found to be defective, the product will be repaired, or at the Company's opinion replaced, without charge, provided that the product:
 1) has been installed and used in accordance with the instructions given with each unit.
 2) has not been connected to an unsuitable electricity supply (The correct electricity supply voltage is shown on the product rating label attached to the unit).
 3) has not been subjected to misuse, neglect or damage.
 4) has not been modified or repaired by any person not authorised by the Company.
IF CLAIMING UNDER THE TERMS OF THE GUARANTEE
 please return the complete product, carriage paid to your original supplier or nearest Vent-Axia Centre, by post or in person. Please ensure that it is adequately packed and accompanied by a letter clearly marked 'Guarantee Claim' stating the nature of the fault and providing proof of date and source of purchase.

As part of the policy of continuous product improvement Vent-Axia reserve the right to alter specifications without notice.



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ACM IN-LINE MIXED FLOW FANS

drawing 1

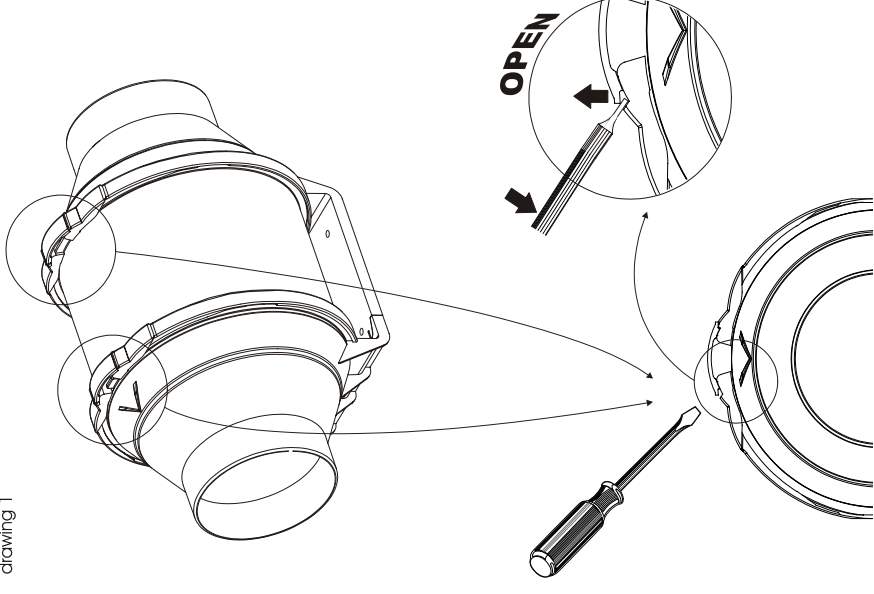


IMPORTANT – READ THESE INSTRUCTIONS FULLY BEFORE COMMENCING THE INSTALLATION

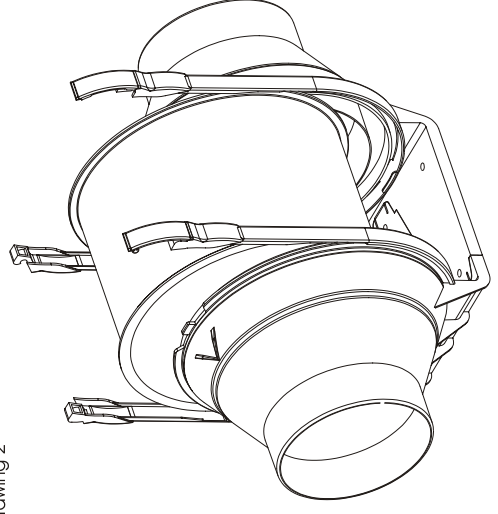
1. Ensure that the mains supply voltage, frequency, number of phases and power rating comply with the details on the rating labels.
2. All wiring must be in accordance with current I.E.E. regulations, BS7671, or the appropriate standards in your country. The fan must be supplied through a double pole isolating switch having a contact separation of not less than 3mm. We recommend that wiring of the equipment terminal box may be made in flexible conduit to facilitate easy maintenance.
3. When a fan is used to remove air from a room containing a fuel burning appliance, the installer must ensure that air replacement is adequate for both the fan and the fuel burning appliance. If a fan is used to supply air into a room, the installer must ensure that the fan intake is located at least 600mm away from any flue outlet.
4. This equipment should not be used where it is liable to be subjected to water spray from hoses, etc., or where temperatures may exceed 50°C.
5. Where ducted fans are used to handle moisture laden air, a condensation trap should be fitted and horizontal ducts should be arranged to slope slightly downwards away from the fan unit.

FAN MOUNTING

1. The fan is designed as an in-line duct fan to be positioned between lengths of ducting. Short duct runs terminating close to the fan (i.e. within 1.5m) must incorporate suitable guards, unless the fan is mounted higher than 2.3m.
2. The fan is suitable for mounting at any angle using the mounting bracket supplied.
3. Plan the installation carefully, taking into consideration the important points noted above, before securely mounting the fan using appropriate screws, bolts, rubber bushes, etc.
4. To gain access to the mounting holes on models **100 and 125 ONLY** proceed as follows: -
 - a. Using a small flat bladed screwdriver, release the two blue plastic clips as shown in drawing 1 opposite.
 - b. Slide out motor impeller assembly see drawing 2 opposite.
 - c. The fan can now be mounted at any angle, using the holes provided.
 - d. Once the base is securely fixed, Slide the motor impeller assembly back as shown in drawing 2. "Click" the blue clips into the opposite side of the banding to lock the assembly together.
5. Other sized fans within the range, have metal banding straps, which can be loosened with a screwdriver to gain access to the mounting foot.



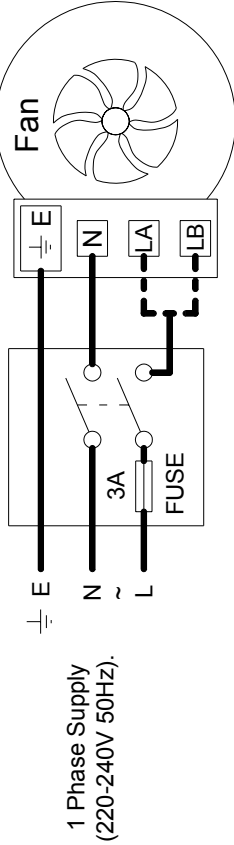
drawing 2





CONNECTIONS

N.B. MODEL SIZES ACM 100, ACM 150 & ACM 150T FANS ARE DOUBLE INSULATED AND CARRY A  MARK. THERE ARE NO EARTH TERMINALS AND THESE FANS MUST NOT BE EARTHED.



CONNECT THE LIVE SUPPLY TO TERMINAL
LA FOR HIGH SPEED OR LB FOR LOW SPEED.

N.B. If fan is used in conjunction with a Vent-Axia speed controller the LA (High Speed) terminal **MUST** be used.

TIMER MODELS


Single speed with overrun timer. The fan must be wired to a remote switch (e.g. light switch). When switched "ON", the fan will operate at full speed, and will continue to run for a preset time after the switch is turned "OFF". The timer is factory set at 20 minutes.

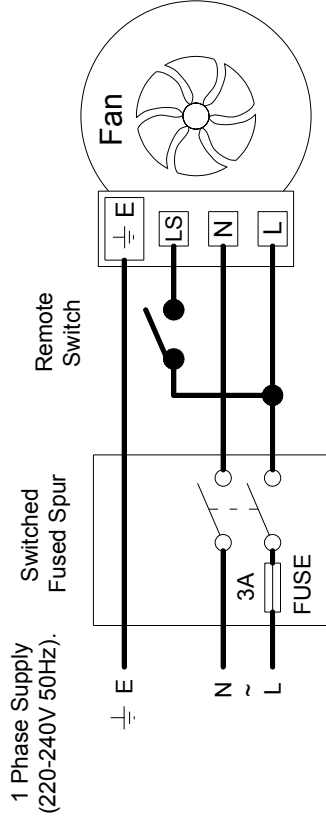
The timer adjuster is located inside the terminal box. ISOLATE UNIT FROM ELECTRICAL SUPPLY before adjusting. To reduce the operating time, turn the adjuster in an anti-clockwise direction.

N.B. Manufacturers of some fluorescent/low energy lighting systems indicate that these can interfere with other electronic/timing circuits. For reliable operation of these circuits we recommend therefore that a tungsten filament light is used.



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MODELS WITH AN INTEGRAL TIMER.

OVER-HEATING PROTECTION

The fan motor is fitted with Thermal Overload Protection. On sizes 100 & 125 this is a one-shot thermal fuse, on all other sizes there is a non self resetting thermal trip. In the event of a fault condition the fan will be automatically switched off. If this occurs isolate the fan, and call your service engineer.

ROUTINE INSPECTION/MAINTENANCE – ISOLATE UNIT FROM ELECTRICAL SUPPLY AND ENSURE THAT IT CANNOT BE ACCIDENTALLY TURNED BACK ON.

1. We recommend that after three months the fan should be inspected to ensure there is no build up of dirt or other deposits on the impeller or motor. Thereafter, it should be checked periodically as experience dictates, or at least twice a year.
2. If the fan is handling dust laden air, we recommend that a filter is fitted to the system, (Suitable filters are available from Vent-Axia Ltd).
3. All Vent-Axia Airtrak fan motors are fitted with sealed for life bearings and therefore do not require lubrication.