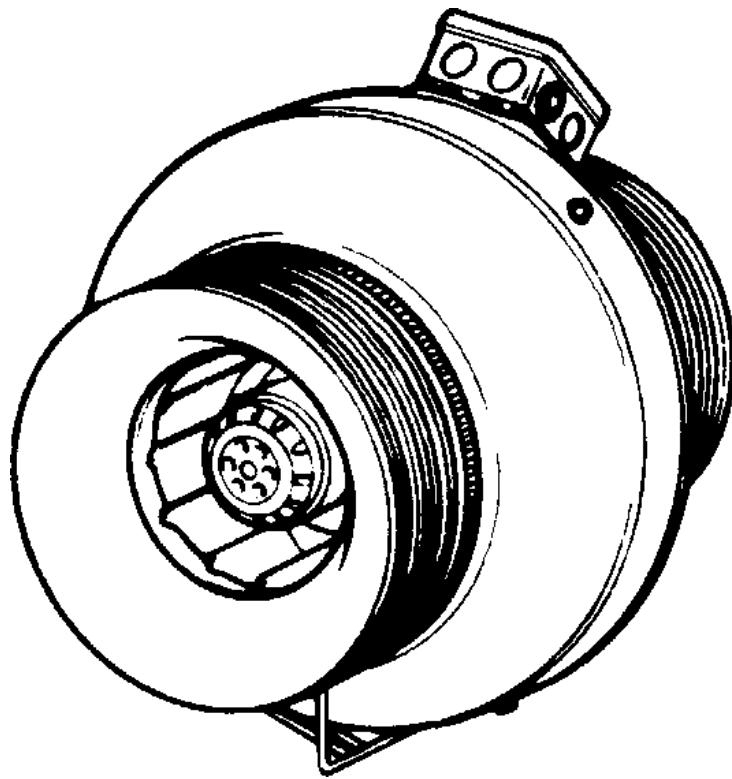


Vent-Axia®

AIRTRAK POWERFLOW AND AIRTRAK
IN-LINE CENTRIFUGAL DUCT FANS
(ACP and ACH Fan Ranges)

Installation and Maintenance Instructions



- High performance
- High efficiency
- Easy to install
- Easy maintenance

220–240V/1/50Hz



AIRTRAK POWERFLOW AND AIRTRAK IN–LINE CENTRIFUGAL DUCT FANS INSTALLATION AND WIRING INSTRUCTIONS

(ACP and ACH fan ranges)

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 technically competent personnel.

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 for this purpose from Vent–Axia.

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

Maintenance work should not be attempted before first switching off and isolating the fan and its control from the electrical supply and ensuring that it cannot be accidentally turned back on again. It is essential to ensure that rotating parts have come completely to rest before maintenance work commences.

Air moving equipment may generate unacceptable noise levels when in operation. Actual sound levels are indicated in the Vent–Axia Industrial Range 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.

IMPORTANT – READ THESE INSTRUCTIONS FULLY BEFORE COMMENCING INSTALLATION

1. Ensure that the mains supply voltage, frequency, number of phases and power rating comply with the details on the rating label.
2. All wiring must be in accordance with current I.E.E. wiring regulations, BS7671, or the appropriate standards in your country. The equipment should be provided with a local double pole isolator switch having a contact separation of at least 3mm.
3. This equipment must be earthed.
4. Ensure safety regulations and practices are adhered to when installing and using this equipment.
5. When the 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.
6. This equipment should not be used where it is liable to be subjected to water spray from hoses etc., or where temperatures may exceed 40°C.
7. 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.
8. When wiring in conjunction with a speed controller, a 5 step auto–transformer is recommended to ensure low noise levels.

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. On models with a remote terminal box remove the lid of the terminal box and secure the box onto the wall via the fixing holes using suitable fasteners.
NOTE: If the mounting surface is metallic, this surface MUST be earthed.

GENERAL WIRING

WARNING – ISOLATE MAINS SUPPLY BEFORE MAKING CONNECTIONS – THIS EQUIPMENT MUST BE EARTHED

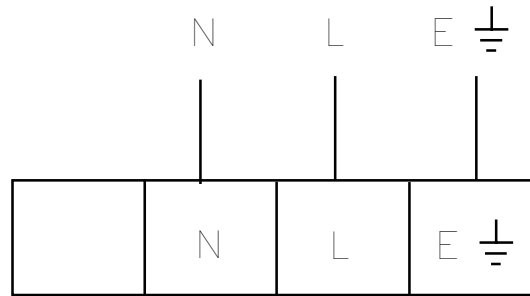
1. All electrical connections should be made by a properly qualified electrician. We recommend that wiring to the equipment terminal box be made in flexible conduit to facilitate easy maintenance.

WIRING DIAGRAMS

AC P range

220–240V~50Hz 1 Phase supply
or
Speed controller output

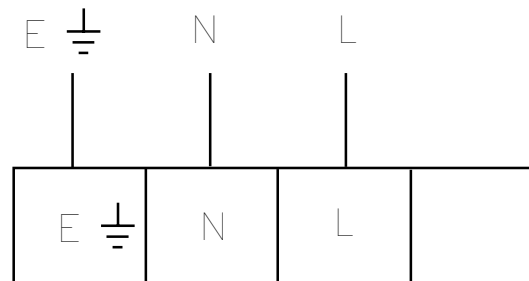
FAN
CONNECTION
TERMINALS



AC H range

220–240V~50Hz 1 Phase supply
or
Speed controller output

FAN
CONNECTION
TERMINALS



Note:

- 1) The electrical circuit must be protected via a double-pole isolator with minimum contact separation of 3mm and suitably sized fuses or circuit breaker.
- 2) Suitable Vent–Axia speed controllers are:—
3A Auto–transformer controller 103 14 103 2.5A electronic controller W103 03 102M

2. Remove the cover from the terminal box to expose the terminal block. Pass the supply cable from the local isolator switch through a grommet in the terminal box and make the connections as indicated on the terminal marker label.
3. If using a Vent–Axia speed controller the speed controller should be supplied from the local isolator switch.
4. Ensure that all earth connections have been made.
5. Replace the terminal box cover. Switch on the mains supply and check the fan operation.

ROUTINE INSPECTION AND 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 and cleaned to ensure there is no build up of dirt or other deposits on the impeller

or motor (Caution – take care not to dislodge any balance weights which may be fitted to the impeller). Thereafter, it should be checked and cleaned periodically as experience dictates, or at least twice a year. 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.).

2. All Vent–Axia Airtrak fan motors are fitted with sealed for life bearings and therefore do not require lubrication.

OVER–HEATING PROTECTION

The fan motor is fitted with standard Thermal Overload Protection. This will automatically switch the fan off in the event of a fault condition. If this occurs isolate the fan, check for and remove any obstruction, leave for a short time for the motor to cool before reconnecting. If this recurs, isolate and call a service engineer.

VENT-AXIA SALES CENTRES

ENGLAND & WALES NATIONAL

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Crawley,
West Sussex RH10 9JA.
Telephone: 01293 530202
Fax: 01293 565169.

SCOTLAND

12 Lambhill Quadrant,
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Kinning Park,
Glasgow G41 1SB.
Telephone: 0141 429 1166
Fax: 0141 429 6616.

NORTHERN IRELAND

Unit 9,
Alanbrooke Park Industrial Estate, Alanbrooke
Road,
Belfast BT6 9HB.
Telephone: 02890 402220
Fax: 02890 403323.

REPUBLIC OF IRELAND

Vent-Axia Ventilation Ltd.
921 Western Industrial Estate,
Naas Road,
Dublin 12.
Telephone: (01) 450 4133
Fax: (01) 450 4570.

Internet site at: www.vent-axia.com

email: info@vent-axia.com

The Vent-Axia Guarantee

● Applicable only to products installed and used in the United Kingdom. For details of 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 option 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 TERMS OF GUARANTEE

● please return the complete product, carriage paid to your original supplier or nearest Vent-Axia Centre, by post or personal visit. Please ensure that it is adequately packed and accompanied by a letter clearly marked 'Guarantee Claim' stating the nature of the fault and providing evidence of date and source of purchase.

● The guarantee is offered to you as an extra benefit, and does not affect your legal rights.

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

Vent-Axia®

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