

ACH

In-Line Centrifugal Duct Fans

Installation and Wiring Instructions



Stock Ref. N°

ACH100B
ACH125B
ACH150B
ACH200B
ACH250B
ACH315B

220-240V~50Hz

Vent-Axia[®]

PLEASE READ INSTRUCTIONS IN CONJUNCTION WITH THE ILLUSTRATIONS.
PLEASE SAVE THESE INSTRUCTIONS

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Installation and Wiring Instructions for the ACH IN-LINE CENTRIFUGAL DUCT FAN range.

IMPORTANT: READ THESE INSTRUCTIONS BEFORE COMMENCING THE INSTALLATION

DO NOT install this product in areas where the following may be present or occur:

- Excessive oil or a grease laden atmosphere.
- Corrosive or flammable gases, liquids or vapours.
- Ambient temperatures higher than 40°C or less than -5°C.
- Possible obstructions which would hinder the access or removal of the Fan.
- Sudden ductwork bends or transformations close to the Fan.

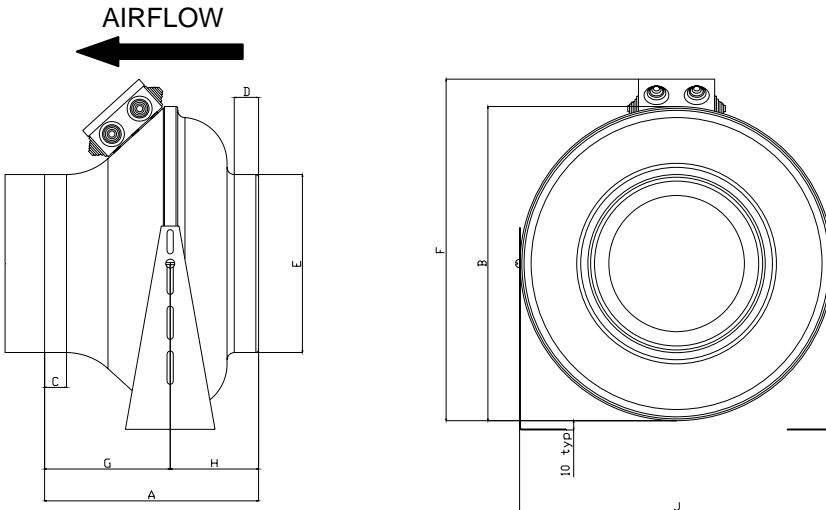
If the unit is to be stored for a long period of time the fan impeller must be rotated by hand at monthly intervals to prevent hardening of the lubricant and corrosion or static indentation of the bearings.

SAFETY AND GUIDANCE NOTES

- All wiring to be in accordance with the current I.E.E. Regulations, or the appropriate standards of your country and **MUST** be installed by a suitably qualified person.
- The Fan should be provided with a local double pole isolator switch having a contact separation of at least 3mm.
- Ensure that the mains supply (Voltage, Frequency, and Phase) complies with the rating label.
- The Fan should only be used in conjunction with the appropriate Vent-Axia products.
- It is recommended that the connection to the fan connector terminals is made with flexible cable.
- When the Fan is used to remove air from a room containing a fuel-burning appliance, precautions must be taken to avoid back-flow of gases into the room from the open flue of gas or other appliance. Ensure that the air replacement is adequate for both the fan and the fuel-burning appliance.
- The Fan should not be used where it is liable to be subject to direct water spray for prolonged periods of time.
- Where ducted Fans are used to handle moisture-laden air, a condensation trap should be fitted. Horizontal ducts should be arranged to slope slightly downwards away from the Fan.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Young children should be supervised to ensure that they do not play with the appliance.
- Note:- This is a class 1 appliance and **MUST** be earthed.

A. INSTALLATION.

The unit 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 2.1m above the floor. If flexible ducting is used it should be fully extended to obtain the best results. Position the fan at the highest point on the system with both ducting runs sloping downwards from this point. In circumstances where an excessive amount of moisture is present in the air then a condensation trap should be installed. When siting the appliance ensure that there is sufficient space to allow access for any servicing and maintenance.



ACH SIZE	A	B	C	D	E	F	G	H	J
100	240	250	35	35.6	98	280	120	120	253
125	240	250	35	35.6	123	280	120	120	253
150	250	342	35	35.6	148	372	130	120	345
160	250	342	38.4	35.6	158	372	130	120	345
200	239	349.4	24.6	27	198	379.4	140	99	353
250	259	349.4	24.6	27	248	379.4	130	129	353
315	259	399.4	31.7	27	313	441	120	139	403

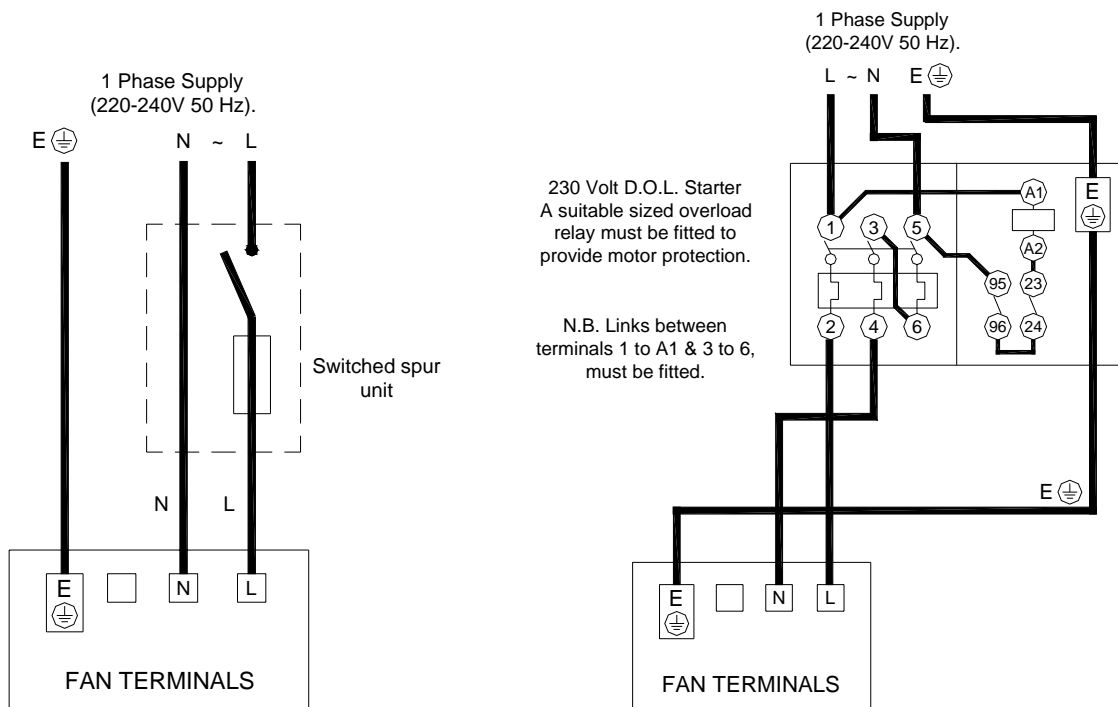
B. WIRING.



WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING THE INSTALLATION / OR MAINTENANCE.

THE ACH FANS ARE CLASS 1 AND MUST BE EARTHED.

1. Remove terminal box cover and put to one side.
2. Select and follow the wiring diagrams. Connect the power supply from the local isolator (via any appropriate controls if fitted).
3. Ensure that all earth connections have been made and that no connection is made to the brown motor wire.
4. Check all connections have been made correctly and ensure all terminal connections and cable grommets are securely fastened.
5. The cable entry must be made using the cable grommets provided in the terminal box.
6. Replace terminal box cover.
7. Ensure the impeller rotates and is free from obstructions



C. OVER-HEATING PROTECTION.

The fan motor is fitted with 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 your service engineer.

D. SERVICING AND MAINTENANCE.



WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING MAINTENANCE.

1. It is recommended that the fan be inspected after three months or sooner if conditions dictate. If a build up of dirt/deposits is evident then this should be carefully cleaned off. Please take care not to damage the fan or affect the balance of the impeller motor assembly (balance weights may be fitted to the impeller).
2. Further inspections should be carried periodically as necessary dependant on experience and site conditions. It is recommended that a minimum of two inspections per year be carried out.

The ACH fans have sealed for life bearings, which do not require lubrication.

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 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:-

- Has been installed and used in accordance with the instructions given with each unit.
- 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).
- Has not been subjected to misuse, neglect or damage.
- 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 effect your legal rights

Vent-Axia

Head Office: Fleming Way, Crawley, West Sussex, RH10 9YX. Tel: 01293 526062 Fax: 01293 551188

UK NATIONAL CALL CENTRE, Newton Road, Crawley, West Sussex, RH10 9JA

SALES ENQUIRIES: Tel: 0844 8560590 Fax: 01293 565169

TECHNICAL SUPPORT: Tel: 0844 8560594 Fax: 01293 539209

For details of the warranty and returns procedure please refer to www.vent-axia.com or write to Vent-Axia Ltd, Fleming Way, Crawley, RH10 9YX