

Vent-Axia®

EUROFLOW KDF FANS

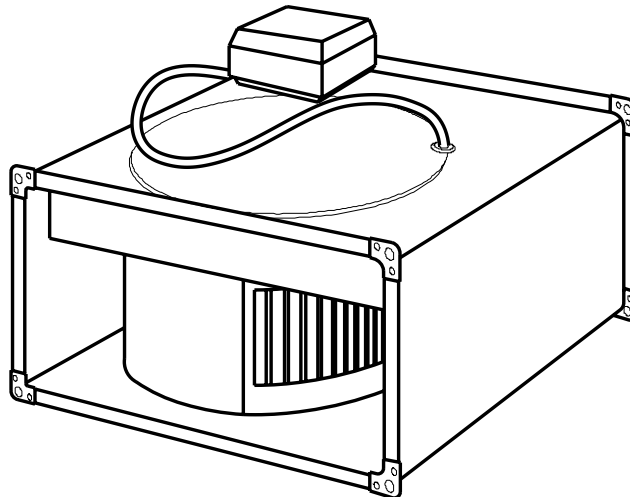
INSTALLATION AND WIRING INSTRUCTIONS

EUROFLOW RECTANGULAR DUCT FANS

KDF200-14V, KDF225-14V, KDF250-14V, KDF280-34V, KDF315-34V



This product is manufactured to conform with the requirements of the following European Directives:
Electromagnetic Compatibility 89/336/EEC
Low Voltage 73/23/EEC



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.

PLEASE LEAVE THESE INSTRUCTIONS WITH THE END USER

VENT-AXIA EUROFLOW FANS INSTALLATION AND WIRING INSTRUCTIONS

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 all pole isolator switch having a contact separation of at least 3mm. We recommend that wiring to the equipment terminal box be made in flexible conduit to facilitate easy maintenance.
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 duct ambient temperatures may exceed 40°C.
7. When the fan is used to handle moisture laden air, a suitable condensate trap and drainage system must be incorporated to ensure safe and healthy operating conditions.
8. When wiring in conjunction with a speed controller, a 5 step auto-transformer is recommended to ensure low noise levels.
9. The motor thermal protector (TK) MUST be connected into the control circuit.
4. Plan the installation carefully, taking into consideration the important points noted above. Ensure there is adequate clearance for the hinged, swing down access door. Securely mount the fan via the fixing holes in the fan casing using appropriate anti-vibration mounts, screws, bolts, rubber bushes, studding etc.

GENERAL WIRING

WARNING

- ISOLATE MAINS SUPPLY BEFORE MAKING CONNECTIONS

- THIS EQUIPMENT MUST BE EARTHED

The motor thermal protector (TK) MUST be connected into the control circuit.

1. All electrical connections should be made by a properly qualified electrician.
2. Remove the terminal box cover to expose the terminal block. Pass the supply cable through a grommet or cable gland (not supplied) 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 isolator switch.

NOTES ON RUNNING

Before switching on CHECK:

1. All mountings are secure.
2. Circuit protection devices are fitted.
3. Earth connections have been made and are secure.

ROUTINE INSPECTION/MAINTENANCE

THIS MUST BE UNDERTAKEN BY A COMPETENT PERSON.

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. Thereafter, it should be checked and cleaned periodically as experience dictates, or at least twice a year. Please take care not to dislodge any balancing weights fitted on the fan blades. 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 EUROFLOW fan motors are fitted with sealed for life bearings and therefore do not require lubrication.
3. Check all fasteners and guards are secure.

DESCRIPTION

The EUROFLOW range of forward curved in-line fans are designed to be positioned between lengths of ducting. The design incorporates an inspection cover for easy maintenance.

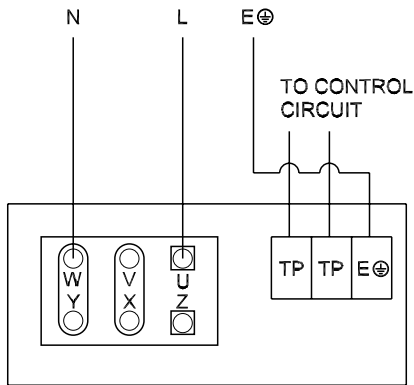
FAN MOUNTING

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) require suitable guards.
2. The fan is supplied with flanges of Euronorm size for ease of connection to the ductwork system.
3. The fan is suitable for mounting at any angle with the fan supported via the mounting holes in the fan casing. The use of flexible connectors at the fan inlet and outlet is recommended to reduced noise and vibration.

WIRING DIAGRAMS

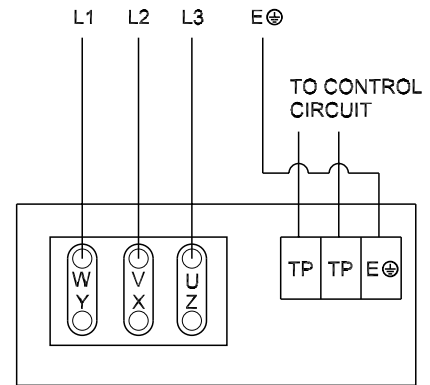
KDF SINGLE PHASE

MODELS
KDF 200-14V
KDF 225-14V



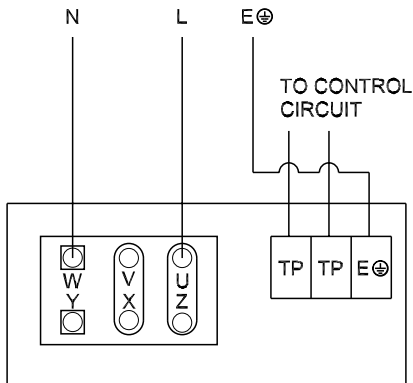
SUPPLY 240/1/50

KDF THREE PHASE



SUPPLY 415/3/50
NOTE: DO NOT connect
star point to Neutral

MODELS
KDF 250-14V



Note:

A trial connection should be made to check that the direction of fan rotation is correct. If incorrect, interchange any two phases of the three phase supply.

Note: The electrical circuit must be protected via an all-pole isolator with minimum contact separation of 3mm and suitably sized fuses or circuit breaker.
When wiring in conjunction with a speed controller, a 5-Step Auto-Transformer is recommended to ensure low noise levels.
Please consult your nearest Vent-Axia Sales Centre for the latest range of suitable controllers.

VENT-AXIA SALES CENTRES

ENGLAND & WALES NATIONAL

CALL CENTRE

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

SCOTLAND

12 Lambhill Quadrant,
Scotland Street Trading Estate,
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.

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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