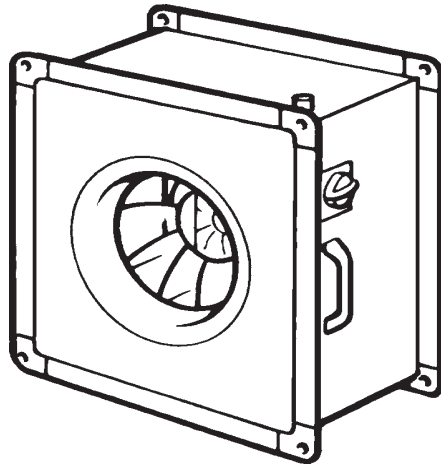




Vent-Axia®

QUADRA MIXED FLOW FANS

INSTALLATION, WIRING AND MAINTENANCE INSTRUCTIONS



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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



INSTALLATION, WIRING AND MAINTENANCE INSTRUCTIONS FOR VENT-AXIA QUADRA MIXED FLOW FANS

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 isolating 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 the air temperatures may exceed 40°C.
 7. The motor Thermal Protector (TK) MUST be connected into a control circuit in order to ensure that the fan cannot restart before the fault condition is cleared and the circuit manually reset.
2. The fan is suitable for mounting at any angle with the fan supported via the mounting holes on the fan casing. The use of flexible connectors and anti-vibration mounts is recommended to minimise noise and vibration.
 3. Plan the installation carefully, taking into consideration the important points noted above. Securely mount the fan via the fixing holes in the fan casing using appropriate screws, bolts, rubber bushes, etc.

GENERAL WIRING

WARNING

- ISOLATE MAINS SUPPLY BEFORE MAKING CONNECTIONS

- THIS EQUIPMENT MUST BE EARTHED

The motor Thermal Protector (TK) MUST be connected into a control circuit in order to ensure that the fan cannot restart before the fault condition is cleared and the circuit manually reset.

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.
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 it should be connected through 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.

DESCRIPTION

The Quadra Mixed Flow fans have been specially designed for square ducts with high performance, low sound levels and COSHH regulations in mind. The casing is manufactured from zinc coated steel with System 30 MEZ flanges at both ends. The 355mm diameter impeller is manufactured in moulded polyamide. All other sizes are constructed in aluminium.

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.

NOTES ON RUNNING

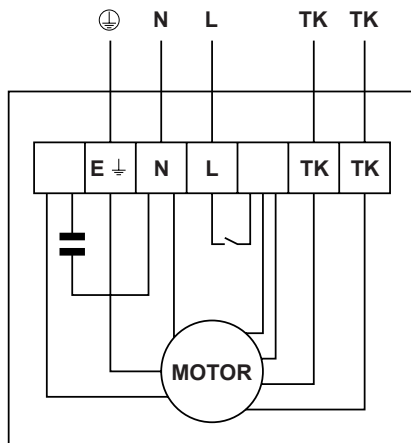
Before switching on CHECK:

1. All mountings are secure.
2. Circuit protection devices are fitted.
3. Earth connections have been made and are secure.
4. The cover of the terminal box securely replaced.

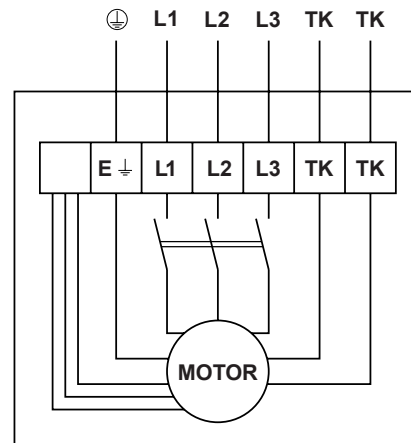


WIRING DIAGRAMS

220-240V ~ 50Hz



380-415V 3 ~ 50Hz



NOTE

The motor thermal protector (TK) MUST be connected into a control circuit in order to ensure that the fan cannot restart before the fault condition is cleared and the circuit manually reset.

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

ROUTINE INSPECTION/MAINTENANCE

WARNING - ISOLATE UNIT FROM ELECTRICAL SUPPLY AND ENSURE THAT IT CANNOT BE ACCIDENTALLY TURNED BACK ON

For additional safety during maintenance a SERVICE SWITCH is provided on the fan terminal box.

NOTE: This is not an isolating switch and should not be used to start or stop the fan.

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. If the fan is handling dust laden air, we recommend that a filter is fitted to the system.

2. All Vent-Axia Square Mixed Flow fan motors are fitted with sealed for life bearings and therefore do not require lubrication.
3. Check all fasteners and guards, when fitted, are secure.





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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 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.



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