

# **Vent-Axia®**

## **CTH & CTV Series Roof Mounted Fans**

Installation & User Instructions



**READ AND SAVE THESE INSTRUCTIONS**

*READ INSTRUCTIONS IN CONJUNCTION WITH ILLUSTRATIONS*



# INSTALLATION AND WIRING INSTRUCTIONS FOR VENT-AXIA CTH & CTV SERIES ROOF MOUNTED FANS



## **IMPORTANT: READ THESE INSTRUCTIONS BEFORE COMMENCING THE INSTALLATION**

We recommend that you check the following points upon reception of the fan:

- 1- That the size is correct.
- 2- That the version is correct
- 3- That the details stated on the rating plate of the motor are the ones needed, such as voltage, frequency, speed, etc.

## **SAFETY AND GUIDANCE NOTES**

- A. All wiring to be in accordance with the current I.E.E. Regulations or the appropriate standards of your country regarding electrical installations and fire protection installations and **MUST** be installed by a suitably qualified person.
- B. Ensure that the mains supply (Voltage, Frequency, and Phase) complies with the rating label.
- C. The Fan should only be used in conjunction with the appropriate Vent-Axia products.

## **Installation**

These roof fans are able to extract air up to 400°C for 2 hours. The maximum temperature of air in normal conditions should not exceed 120°C except for the following models:

Model CTVB/4-180 and CTVB/4-225    200°C

Model CTHV4-180 and CTHB/4-225    200°C

These maximum temperatures are only valid if the fan is working, It is only in this condition that the cooling system is operative.

The surrounding temperature must not exceed 70°C.

The roof fans in the range must be installed horizontally with a maximum gradient of 10°.

### **Installation on a plinth**

The JMS support frame for each model should be used for this kind of mounting.

Bend the mounting legs.

Fit the support frame

Place the rubber joint in the support frame.

### **Installation on a flat roof**

The JBS insulated support base for each model should be used for this kind of mounting.

Fix the support base to the roof making sure of a firm seal between the roof and the support.

Place the rubber joint in the support base.

Screw the unit to the support base.

### **Installation on a flat roof**

The JCC adaptor for circular ducting for each model must be used for this type of installation, and is only valid up to Model 400. The instructions for mounting are supplied with the accessory.

### **Electrical Connection**



Check that the voltage and frequency of the mains are the same as those indicated on the rating plate on the apparatus (max. variation of voltage and frequency +/-5%).

Single 230V 50Hz

Three phase 400V (Δ) 50Hz (230/400V 50Hz (on request))

Once working, the current absorbed by the motor must not exceed that indicated on the rating plate. The models 140 to 400 incorporate thermal protection in the motor winding. The thermal protector when connected following the enclosed diagram stops the motor when there is a problem, thus avoiding overloads and excessive temperatures and giving longer motor life and greater user safety.

## WARNING! DO NOT CONNECT THE THERMAL PROTECTION IF USING THE VENTILATOR IN FIRE PREVENTION INSTALLATIONS

Check that the correct connection has been made to earth. Before handling the unit, make sure that it is disconnected, not just switched off. To enter the terminal box, unscrew the screws in the motor protection cover (fig.A). After making electrical connection check that the impeller is turning in the direction indicated by the arrow fixed to the upper support.

The following diagrams must be observed when connecting:

Three phase models 140-630 Fig.C

Single phase models 140-225 Fig.B  
250-400 Fig.D

The motors in this series have IP55 protection against solid particles and water, as well as class F electrical insulation.

### Speed control

Three phase models can be controlled by means of an auto-transformer controller.

The 400V delta motor provides two speeds depending on how it is connected to the mains:

Δ Delta connection Fast

Y Star connection Slow

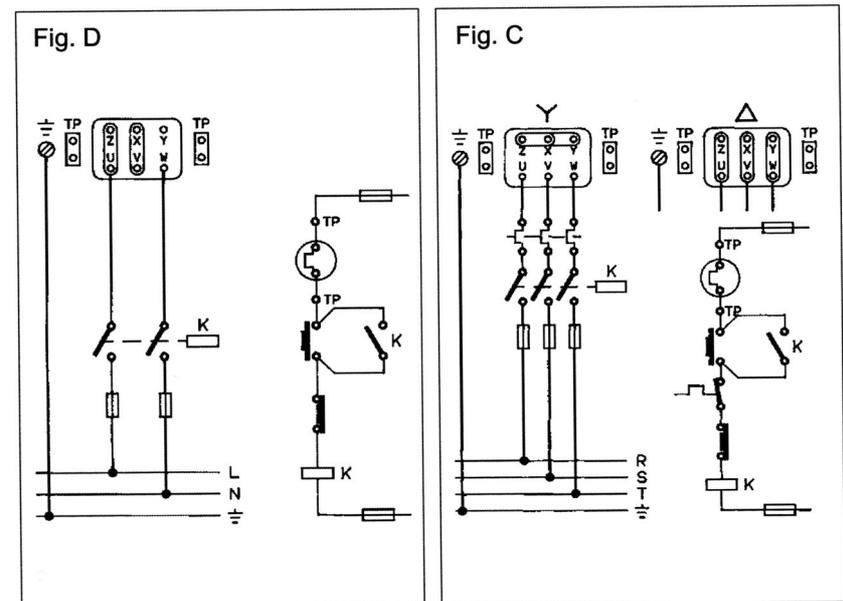
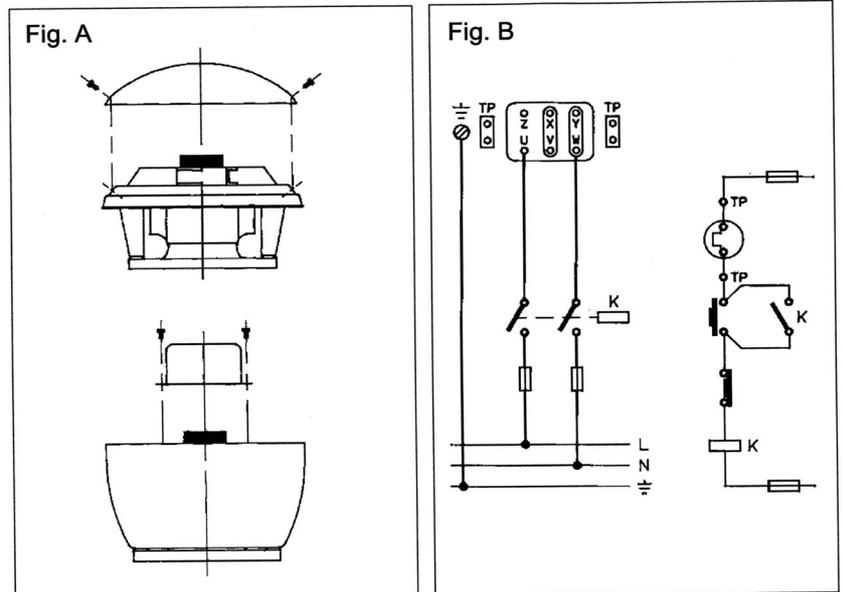
## ROUTINE INSPECTION AND MAINTENANCE

**ISOLATE THE FAN FROM THE ELECTRICAL SUPPLY AND ENSURE THAT IT CANNOT BE RECONNECTED DURING THE INSPECTION/MAINTENANCE.**

1. The fan should, at intervals appropriate to the installation, be inspected and cleaned to ensure there is no build up of dirt or other deposits on the impeller or the motor. (Caution - Take care not to dislodge any balance weights which may be fitted to the impeller). If the fan is handling dust laden air it is recommended that a filter is installed.

2. The fan motors are fitted with sealed for life/maintenance free bearings and do not require lubrication.

If this unit is intended to operate only in the event of fire, it has to be checked periodically.



## OVERHEATING PROTECTION

The fan motors are 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 from the power supply and check for any obstruction. Leave the fan for a short period of time for the motor to cool before reconnecting the power supply. If the fault reoccurs isolate the power supply and call a service engineer

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Did you find these instructions easy to use?

We value your comments, contact us via:

Email: [info@vent-axia.com](mailto: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 of the United Kingdom contact your local supplier.

Vent-Axia guarantees this product 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 discretion the product will be replaced without charge, provided that the product:

- 1). Has been installed and used in accordance with the instruction given with each unit.
- 2). The electricity supply complies with the rating label.
- 3). Has not been misused, neglected or damaged.
- 4). Has not been modified or repaired by any person not authorised to do so by Vent-Axia.

### IF CLAIMING UNDER THE TERMS OF THE GUARANTEE

Please return the complete product, carriage paid to your original supplier 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 the 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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