CFF FUME HANDLING FANS

Installation and Wiring Instructions

PLEASE READ INSTRUCTIONS IN CONJUNCTION WITH ILLUSTRATIONS. PLEASE SAVE THESE INSTRUCTION
CFF Fitting & Wiring Instructions

Declaration of conformity
The CFF range complies with the safety conditions set out in the Low Voltage Directive CEE/72/23, CEE/93/68. The harmonized rules for this declaration are UNE EN 60335-1:97 and CEI-60335-2-80: 97.

Applications
CFF fans are suitable fans for extraction of air containing corrosive components especially for:
- Chemical industry
- Petrochemical industry
- Laboratories

Components
The fans include the following elements:
- Scroll, impeller and inlet flange made of Polypropylene material.
- Models 160 and 315 are supplied with a painted steel sheet motor support.
- Three phase asynchronous electric motor at 230/400 V, 50Hz depending on the model, IP 55, class F.

On receipt of the fan, please check the following:
1– The fan size is correct.
2– The performance is correct.
3– The details printed on the rating plate are correct: voltage, frequency, speed, etc.

Safety conditions
In order to comply with the Safety Regulations, when a fan is installed in such a way that the dangerous areas (*) is accessible to the users, one meter of ducting should be mounted on the air inlet and air outlet of the fan before operating the unit.

(*) Definition of a dangerous area, is any are inside or around a unit where the presence of a person means some risk for the safety or health of that person.

- Do not start the unit before fixing it firmly.
- The emission to atmosphere of harmful particles or gasses must be controlled within the parameters laid down in the relevant regulations.
- Before handling the appliance, make sure that the unit is switched off and disconnected from the mains supply.

Electrical connection
- Please ensure that the supply voltage and frequencies are in accordance with the product rating plate.
  (Maximum variation in voltage and frequency ± 5%)
- For connection to the mains supply, follow the diagrams supplied with each unit.
- The thermal protection device when connected in accordance with the enclosed diagram, stops the unit in the event of any fault or malfunction thus avoiding overheating and ensuring long life for the motor and increased safety for the user.
- The connection cable to the mains supply must be type H05VV-F 5x2.5 mm².
- Check that the earth connection is correctly carried out.
- Once the unit is on, check that the absorbed power does not exceed that shown on the rating plate.

Operation
Once the connection is completed, start the Unit checking that:

1st The blade rotates in the correct direction.
2nd To change the direction of rotation of three phase motors, reverse the connection of any two cables on the terminal block.
3rd Check that there is no vibration which could affect the stability of the unit or cause any deterioration or damage.

In the event of faulty functioning, stop the unit immediately and correct the fault.
Orientation of the discharge outlet
In the units with steel sheet motor support, the orientation of the discharge outlet can be changed. (Except the CFF31534).
To do this it is necessary to dismantle the inlet flange, remove the bearing, unscrew the scroll turning it to the desired position. To complete the change carryout the above procedures in reverse order.

Maintenance
We recommend that periodic maintenance is carried out as follows:
**Before handling the fan make sure that it is disconnected from the mains supply.**

- Periodically check and clean the electric motor, the impeller blade and all the fan parts in general. The frequency of cleaning and maintenance will depend on the working conditions and should be determined by periodic inspections.

- Clean the blade periodically. Possible coatings and encrustations on the blades, apart from decreasing the aerodynamic efficiency of the unit, may cause some imbalance in the impeller leading to failure of the motor bearings.

- Remove the dust deposits and encrustations on the motor in order not to reduce the heat dissipation efficiency and thereby jeopardize its correct functioning due to overheating.

- These units are equipped with enclosed bearings. These are lubricated for life and there is no need of any additional lubrication during the life of the bearing. The design life of the unit is expected to be not less than 20,000 working hours at a temperature of 45°C.

Wiring Diagrams
Three Phase fan connected
To a 415V D.O.L starter.

![Three Phase Wiring Diagram](image1)

Single Phase fan connected
To a 240V D.O.L starter.

![Single Phase Wiring Diagram](image2)
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 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.