FANTECH FG 6

Fantech FG 6 Inline Centrifugal Duct Fan

Model: FG 6

INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Fantech FG 6 Inline Centrifugal Duct Fan. Please read this manual thoroughly before attempting to install or operate the unit.

Image: The Fantech FG 6 Inline Centrifugal Duct Fan, a cylindrical metal housing with a black electrical box on top, designed for duct integration.

IMPORTANT SAFETY INSTRUCTIONS

To reduce the risk of fire, electric shock, or injury to persons, observe the following:

- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.

- Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back-drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air

Conditioning Engineers (ASHRAE), and the local code authorities.

- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Ducted fans must always be vented to the outdoors.
- Do not use this fan with any solid-state speed control device unless specifically designed for this fan.
- Always disconnect power before servicing or cleaning the unit.

WHAT'S IN THE BOX

Upon unpacking, please verify that all components are present and undamaged:

- Fantech FG 6 Inline Centrifugal Duct Fan Unit
- Instruction Manual (this document)

Note: Mounting hardware and electrical wiring components are typically sold separately and are not included with the fan unit.

TECHNICAL SPECIFICATIONS

Attribute	Detail
Model Number	FG 6
Type	Inline Centrifugal Duct Fan
Housing Material	Metal
Duct Diameter	6 inches
Airflow Capacity	303 CFM (Cubic Feet per Minute)
Voltage	120V
Package Dimensions	16.4 x 16.3 x 11.7 inches
Weight	9.3 Pounds
Manufacturer	Fantech

SETUP AND INSTALLATION

Proper installation is crucial for the performance and longevity of your Fantech FG 6 fan. It is recommended that installation be performed by a qualified professional.

Pre-Installation Checklist:

- Ensure power supply is disconnected at the circuit breaker before beginning any work.
- Verify that the ducting system is clean and free of obstructions.
- Confirm the fan's voltage (120V) matches your electrical supply.
- Gather necessary tools: screwdriver, wire strippers, duct clamps, mounting hardware (e.g., Fantech FC 6 Mounting Clamps, if applicable), sealant tape.

Installation Steps:

1. **Mounting the Fan:** Select a suitable location in the duct run. The fan can be mounted at any angle. Use appropriate mounting brackets or straps to secure the fan firmly to a joist, rafter, or other stable structure. Ensure the fan is accessible for future maintenance.

2. **Duct Connection:** Connect the fan to the existing ductwork using flexible or rigid ducting. Secure all connections with duct clamps and seal with appropriate duct tape or mastic to prevent air leaks. Ensure the airflow direction arrow on the fan body points towards the exhaust outlet.

3. **Electrical Wiring:**

   - Open the electrical junction box on the fan.
   - Connect the incoming power supply wires (Line, Neutral, Ground) to the corresponding terminals inside the junction box. Follow local electrical codes.
   - If using a speed controller (sold separately), wire it according to the controller's instructions and the fan's wiring diagram.
   - Close the junction box securely.

4. **Final Check:** Double-check all connections, both mechanical and electrical, to ensure they are secure and correctly installed.

OPERATING INSTRUCTIONS

The Fantech FG 6 fan is designed for continuous operation in appropriate ventilation systems.

Initial Start-up:

1. After installation is complete and all safety checks are performed, restore power to the circuit.
2. Activate the fan using its dedicated switch or control system.
3. Listen for any unusual noises or vibrations. A properly installed fan should operate smoothly and quietly.

Normal Operation:

The FG 6 fan is an inline booster fan, meaning it is intended to enhance airflow within a duct system. It can be integrated into various HVAC applications, including residential, commercial, and industrial settings.

- **Airflow:** The fan provides 303 CFM of airflow, suitable for boosting ventilation in specific zones or extending duct runs.
- **Speed Control:** If a compatible speed controller is installed, adjust the fan speed as needed to achieve desired airflow and noise levels. Operating at lower speeds can reduce noise and energy consumption.
- **Continuous Use:** This fan is designed for continuous duty, but regular inspection and maintenance are recommended.

MAINTENANCE

Regular maintenance ensures optimal performance and extends the lifespan of your Fantech FG 6 fan. Always disconnect power before performing any maintenance.

Recommended Maintenance Schedule:

- **Quarterly (or as needed):**

  - **Inspect Fan Blades:** Visually inspect the fan impeller for any accumulation of dust, dirt, or debris. Excessive buildup can reduce efficiency and cause imbalance.
  - **Clean Fan Blades:** If necessary, carefully clean the fan blades using a soft brush or cloth. For stubborn dirt, a mild detergent solution can be used, ensuring the motor and electrical components do not get wet. Allow to dry completely before reassembly.
  - **Check Duct Connections:** Ensure all duct connections remain secure and sealed. Re-seal any loose areas with duct

tape or mastic.

- **Annually:**

  - **Inspect Electrical Connections:** With power disconnected, check all electrical connections for tightness and signs of wear or corrosion.
  - **Motor Inspection:** Listen for any unusual motor noises during operation. The motor is typically maintenance-free and sealed, but any abnormal sounds may indicate an issue.

Do not lubricate the motor. The motor is permanently lubricated and requires no additional oiling.

TROUBLESHOOTING GUIDE

Before contacting support, please refer to the following common issues and their solutions:

Problem	Possible Cause	Solution
Fan does not operate	No power supply Loose wiring connection Faulty switch or controller	Check circuit breaker and power source. Verify all electrical connections are secure (with power off). Test switch/controller or bypass temporarily to check fan.
Reduced airflow	Blocked ductwork Dirty fan blades Air leaks in ducting Incorrect fan speed setting	Inspect ductwork for obstructions. Clean fan blades (see Maintenance section). Seal all duct connections. Adjust speed controller to a higher setting.
Excessive noise or vibration	Loose mounting Debris on fan blades Damaged impeller Motor issue	Ensure fan is securely mounted. Clean fan blades thoroughly. Inspect impeller for damage; replace fan if necessary. If motor noise persists, contact support.
Overheating	Insufficient airflow Motor overload	Check for duct obstructions and clean fan blades. Ensure fan is not operating against excessive static pressure.

If the problem persists after attempting these solutions, please contact Fantech customer support.

WARRANTY INFORMATION

Fantech products are manufactured to the highest quality standards and are backed by a limited warranty. Specific warranty terms and conditions may vary by region and product. Please refer to the official Fantech website or contact customer support for detailed warranty information applicable to your FG 6 fan.
Generally, the warranty covers defects in materials and workmanship under normal use and service. It typically does not cover damage resulting from improper installation, misuse, abuse, unauthorized repairs, or acts of nature.
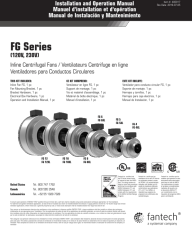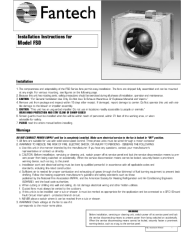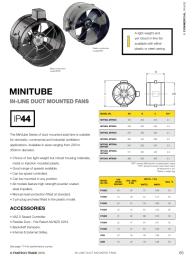
CUSTOMER SUPPORT

For technical assistance, parts, or warranty claims, please contact Fantech customer support:

- **Website:** Visit the official Fantech website for product information, FAQs, and contact forms.
- **Phone:** Refer to the Fantech website for regional contact numbers.
- **Email:** Use the contact form on the Fantech website for email inquiries.

When contacting support, please have your product model number (FG 6) and purchase date available.

Related Documents - FG 6

[Fantech FG Series Inline Centrifugal Fan Installation and Operation Manual](#)

Installation and operation guide for Fantech FG Series inline centrifugal duct fans. Includes safety warnings, dimensions, installation procedures, wiring diagrams, troubleshooting, maintenance, and warranty information.

[Fantech FRD Series Inline Centrifugal Fans Installation and Operation Manual](#)

Installation and operation guide for Fantech FRD Series inline centrifugal fans. Covers parts, safety, mounting, dimensions, wiring, and warranty. Features AMCA and UL/cULus certifications.

[Fantech FSD Series Fan Installation Instructions and Manual](#)

Comprehensive installation instructions, safety warnings, mounting illustrations, dimensional data, wiring schematics, and warranty information for Fantech FSD Series inline duct fans, including models FSD 18, FSD 20, FSD 22, and FSD 26.

[Fantech DEDPV-705 Dryer Exhaust Duct Power Ventilator Installation and Operation Manual](#)

This manual provides comprehensive instructions for the installation and operation of the Fantech DEDPV-705 Dryer Exhaust Duct Power Ventilator. It includes essential safety information, step-by-step installation guides, sequence of operation, maintenance recommendations, troubleshooting tips, and warranty details.

[Fantech Minitube In-Line Duct Mounted Fans - Technical Specifications](#)

Explore the Fantech Minitube series of in-line duct mounted axial fans. This document provides detailed technical specifications, dimensions, performance data, and available accessories for commercial and industrial ventilation applications.

[Fantech FKD/KD Series Inline Centrifugal Fans Installation and Operation Manual](#)

Comprehensive guide for the installation, operation, and safety precautions for Fantech FKD/KD Series inline centrifugal fans. Includes multilingual instructions, dimensions, wiring diagrams, and warranty information.