



Installation, Operation and Maintenance Instructions

EN

bathfan Commercial COM200–300–400–500

Ceiling Mount Exhaust Fan with Metal Casing



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1 Introduction

1.1 Product Description

This product is a ceiling mount exhaust fan with a metal casing.

This fan has rotating parts and personnel must exercise safety precautions during installation, operations, and maintenance.

1.2 Intended Use

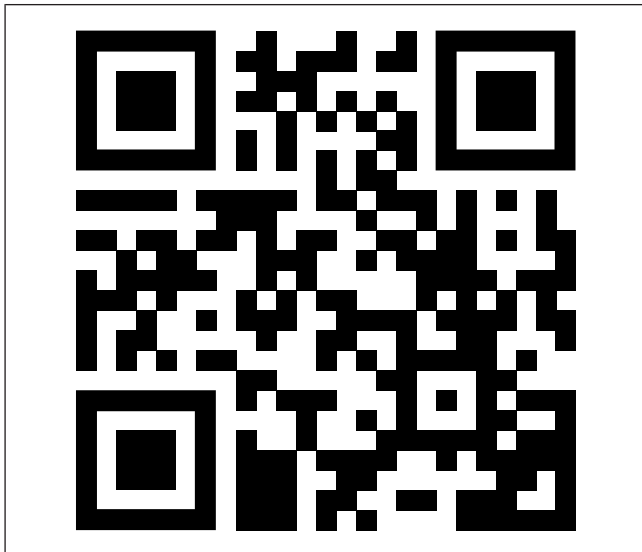
Use this product only in the manner intended by Fantech. If you have any questions, please contact a Fantech representative.

1.3 Document Description

This document contains instructions for installation, operation and maintenance of the product. The procedures must be done by approved personnel only.

Speak to a Fantech representative for more information on how to install the product in different installation locations.

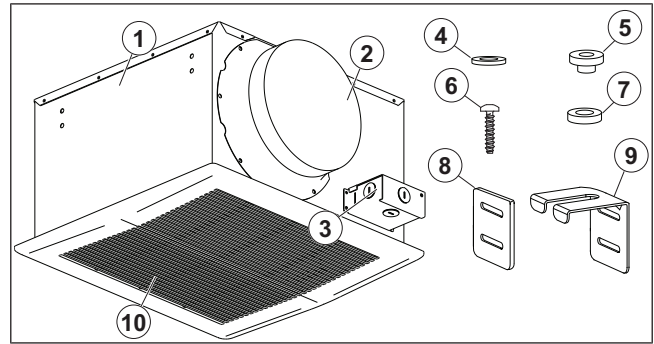
1.4 Fantech Warranty



Make a scan of the code above to access Fantech's warranty in English, French, or Spanish. This product has a 5 year warranty.

If additional support is needed to retrieve the warranty, visit fantech.net; call (800) 747-1762 (US), (800) 565-3548 (Canada), or +52 55 1328-7328 (Latin America); email support@fantech.net; or mail us at 10048 Industrial Blvd, Lenexa, KS 66215 United States or at 50 Kanalfläkt Way, Bouctouche, NB E4S 3M5 Canada.

1.5 Product Overview



1. Casing, quantity 1
2. Duct Connector, quantity 1
3. Junction Box, quantity 1
4. Washer, quantity 8
5. Rubber 1, quantity 4
6. A Screw, quantity 8
7. Rubber 2, quantity 4
8. Rubber 3, quantity 4
9. Hanger Bracket, quantity 4
10. Ceiling Grille, quantity 1

1.6 Type Designation

Product Name	Model Name	bathfan Commercial COM200-300-400-500
Duct Collar Dimensions in inches (mm)	bathfan Commercial COM200-300-400-500, #484320	8 (203)
Motor Type	DC: Direct Current, 1-phase	

2 Safety

2.1 Safety definitions

Warnings, cautions and notes are used to point out specially important parts of the manual.



Warning

If you do not obey these instructions, there is a risk of death or injury.



Caution

If you do not obey these instructions, there is a risk of damage to the product, other materials or the adjacent area.

Note:

Information that is necessary in a given situation.

2.2 Safety Instructions



Warning

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS - OBSERVE THE FOLLOWING:

- Use this unit only in the manner intended by the manufacturer. If you have any questions, contact your manufacturer's representative.
- Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
- 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 and ceiling, do not damage electrical wiring and other hidden utilities.
- Ducted exhaust fans must always be vented to the outdoors.
- If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Circuit Interrupter) – protected branch circuit.
- Never place a switch where it can be reached from a tub or shower.
- TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCTWORK.
- Make sure the product is correctly grounded.
- To Reduce The Risk Of Fire Or Electric Shock, Do Not Use This Fan With Any Solid-State Speed Control Device.

- Do not mount this product in kitchens.
- To reduce risk of fire and to properly exhaust air, be sure to duct air outside.

Do not vent exhaust air into spaces within walls or ceilings or into attics, crawl spaces, or garages.

- Do not install this product in a ceiling with a thermal insulation value more than R40.



Caution

To decrease the risk of product malfunction or damage to the product or surrounding finishes and walls, read and obey the caution instructions that follow before you do work on the product:

- For General Ventilating Use Only. Do Not Use To Exhaust Hazardous Or Explosive Material and Vapors.
- Do not let unwanted objects enter the product (drywall spray, construction dust, and more).

2.3 Personal protective equipment

Use personal protective equipment during all work on the product.

- Approved eye protection
- Approved protective helmet
- Approved hearing protection
- Approved protective gloves
- Approved protective shoes
- Approved work clothing

3 Installation

3.1 To Set the Product Speed

Note:

For only the bathfan Commercial COM200–300–400–500.

Legend for Diagram	
English Terminology	Meaning
CONTROL BOX	Control Box
SWITCH POSITION	Switch Position
AIRFLOW (CFM)	Airflow, Cubic Feet per Minute
DUCT DIAMETER	Duct Diameter

Note:

The toggle switch will adjust the upper fan speed from 200, 300, 400, 500 Cubic Feet per Minute (CFM).

- To adjust the preselected airflow, adjust the control switches according to the graphic below.





Note:

Dimensions are in inches (mm).

COM200–300–400–500

1

CONTROL BOX

SWITCH POSITION				
AIRFLOW (CFM)	200	300	400	500
DUCT DIAMETER	8 (203)			

■ SWITCH POSITION

3.2 To Mount the Product

Note:

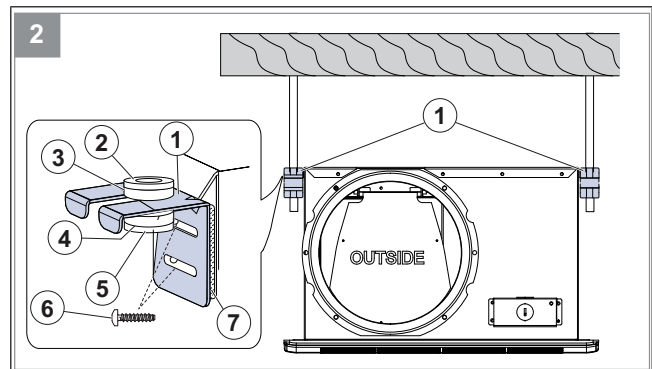
This product is type IC (Inherently Protected).

Note:

To make sure the product can be set correctly between the framing, hanger brackets have been supplied.

- Before installation, remove the product from the packaging and set the packaging aside.
- Identify the locations of the screw holes on the side of the product casing, and the slots on the hanger brackets.
- Using (2) A Screws, attach (1) rubber 3 to the back side of (1) hanger bracket.
- Using (2) A Screws, attach (1) hanger bracket to the side of the product casing.

- Through the top of (1) hanger bracket, connect (1) rubber 1 to (1) rubber 2.
- Repeat the previous 4 steps until a total of (4) hanger brackets are mounted on the sides of the product casing.
- Drill (4) holes in the ceiling joists in proportion to the location of the (4) hanger brackets on the product.
- Assemble (1) washer on (1) large anchor bolt (not included).
- Attach (1) large anchor bolt through the top of (1) hanger bracket on the product.
- Align (1) washer on (1) large anchor bolt attached through the top of (1) hanger bracket.
- Repeat the previous 3 steps to assemble (3) large anchor bolts through the tops of (3) hanger brackets.
- Using the (4) large attached anchor bolts, mount the product in the ceiling.



- Hanger Bracket
- Washer
- Rubber 1
- Rubber 2
- Washer
- A Screw
- Rubber 3

3.3 To Plan the Duct Run



Warning

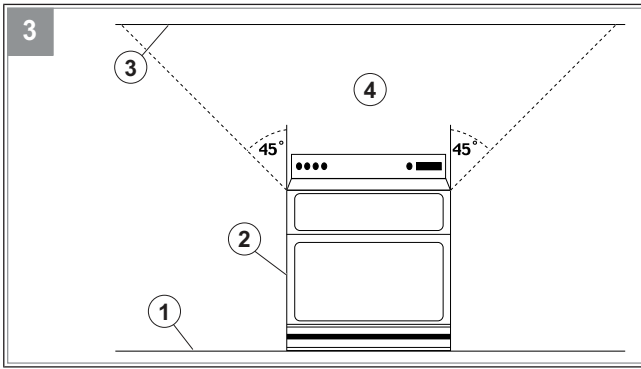
Do not install the product above or inside the area within 45 degrees on either side of any kind of cooking equipment. Refer to Figure 3.



Caution

To keep pressure losses to a minimum, and promote sufficient airflow, observe the following:

- Where possible, use short and straight duct run lengths.
- Do not install the product with existing duct.
- Do not install smaller than recommended duct on the product.



1. Floor
2. Cooking Equipment
3. Ceiling
4. Cooking Area

3.4 To Attach the Duct

Note:

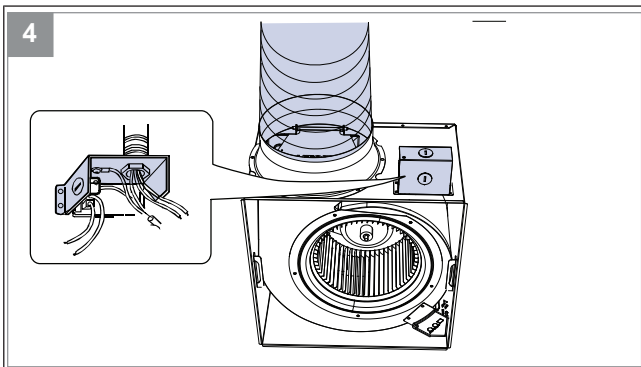
For quiet operation, and to maximize performance, Fan-tech recommends the following:

- Use insulated flexible duct for quiet operation
- If rigid duct is used, use 1–3 feet (0.3–0.91 meters) of insulated flexible duct.
- Insulate the duct to minimize energy losses.
- If installing in an unconditioned space, attach insulation to the product to prevent condensation

Note:

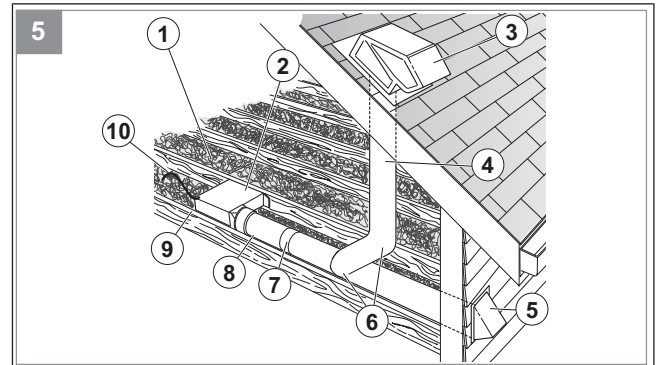
3/8 inch (10mm) strain relief is not included.

- 1 Remove cover of the junction box and set aside.
- 2 Refer to the [4.4 Wiring Diagrams](#) section.
- 3 Attach a trade sized 3/8 inch (10mm) strain relief to the junction box knockout hole.
- 4 Position the wires of the junction box through the strain relief.
- 5 Once the wires of the junction box have been correctly connected, replace the junction box cover.
- 6 Using duct tape, attach the duct to the duct connector.
- 7 Examine the duct around the duct connector to make sure the seal is air tight.



3.5 To Manage the Duct Run

- 1 Using duct tape, attach additional ducts to the product to make sure air is released to the outdoors.
- 2 Depending on the shortest & straightest direction to the outdoors, place the duct run either through the roof or through the wall.
- 3 If the duct was installed through the roof, attach an applicable roof cap to the end of the duct run.
- 4 If the duct was installed through the wall, attach an applicable wall cap to the end of the duct run.
- 5 Place insulation around the product's casing.
- 6 With sealant, close all gaps between the framing and the product's casing.



1. Insulation
2. Product Casing
3. Roof Cap
4. Vertical Duct Run
5. Wall Cap
6. Round Elbows
7. Duct Tape Attached to Duct Joints
8. Horizontal Duct Run
9. Sealed Gaps
10. Power Cable

4 Electrical connection

4.1 To do before the electrical connection

- Make sure that the electrical connection agrees with the product specification on the motor name plate.
- Make sure that the environment for electrical connection is clean and dry.
- Make sure that the wiring diagram that is included with the supply of the product agrees with the terminals in the connection box.

4.2 To connect the product to the power supply

- Complete the electrical connection for the motor. Refer to the motor wiring diagram that is included with the product.
- Make sure that the cross section of the protective grounding is equal to or larger than the cross section of the phase conductor.

4.3 Motor Protection

This product has integrated motor thermal overload protection. Reset the motor protection by disconnecting the fan from power supply for 60 seconds.

4.4 Wiring Diagrams



Caution

Do not place the power or light switch where it can be touched from a shower or tub.

Note:

To connect power to this product, use a minimum of 14 American Wire Gauge (AWG) conductor with temperature rating of at least 90° Celsius (190° Fahrenheit).

Note:

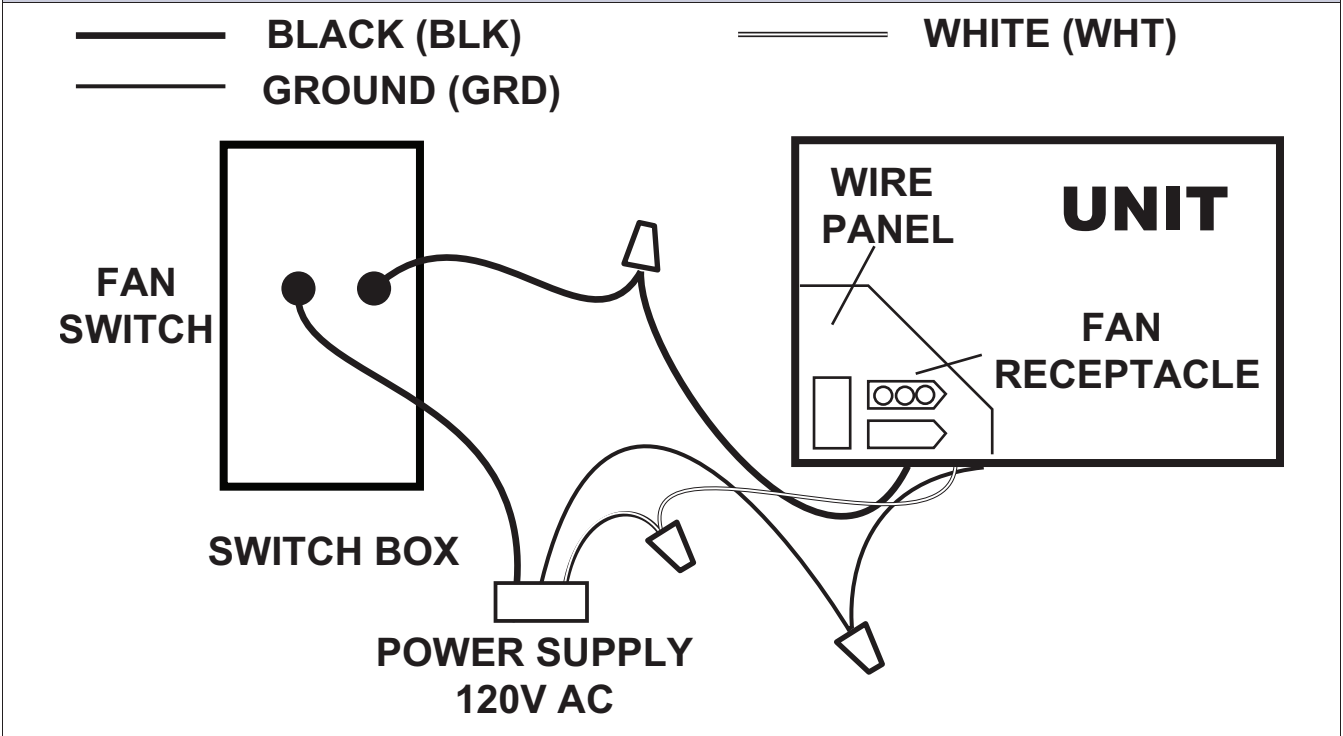
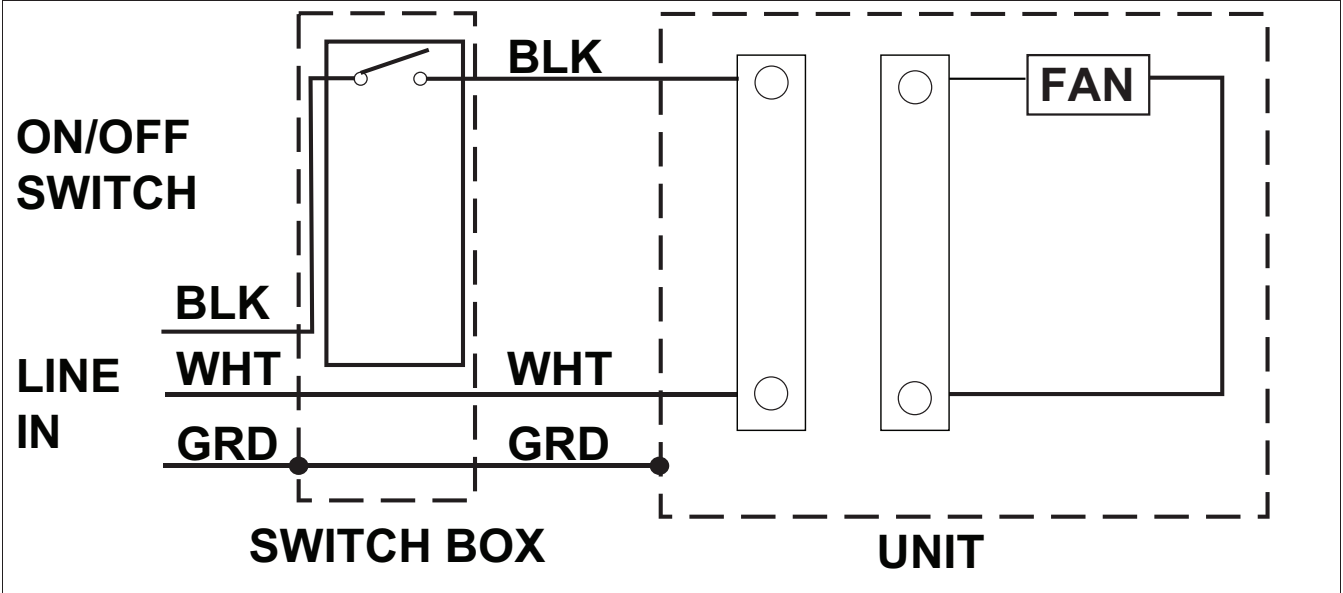
Refer to the following wiring diagrams to attach the wires of the product to the wires of the house.

Legend for Diagram

English Terminology	Meaning
ON/OFF SWITCH	On/Off Switch
LINE IN	Line In
BLACK (BLK) (Line)	Black (Line)
WHITE (WHT) (Neutral)	White (Neutral)
GROUND (GRD)	Ground
UNIT	Unit
FAN	Fan
SWITCH BOX	Switch Box
POWER SUPPLY 120V AC	120 Voltage Alternating Current Power Supply
FAN RECEPTACLE	Fan Receptacle
WIRE PANEL	Wire Panel

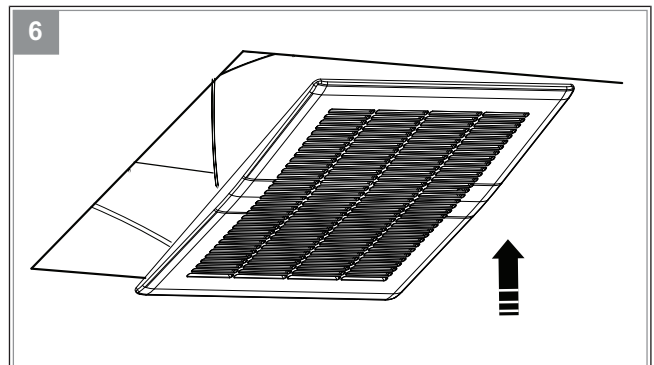
1 Take 120 Volt Alternate Current (AC) housing wires to the location of the product.

2 Using UL-approved connectors only, attach the wires of the product to the wires of the house.



4.5 To Attach the Ceiling Grille

- 1 Make a cut around the casing of the product.
- 2 Align the ceiling fan grille with the casing of the product.
- 3 Attach (2) grille springs into the correct holes of the product.
- 4 Push the ceiling fan grille into the casing of the product correctly.



5 Operation

5.1 To Start the Product

- 1 Make sure that 120 volts of Alternate Current (AC) wiring are attached to the product.
- 2 Set the switch to the ON position.
- 3 After a soft start (5–10 seconds), make sure that the product works as intended.

5.1.1 To Stop the Product

- 1 Set the switch to the OFF position.

6 Maintenance



Warning

Set the installed switch(es) in the OFF position before you do the maintenance unless the instructions tell you differently. Make sure that the switch(es) is not accidentally set in the ON position.

6.1 To Maintain the Product



Caution

If the product suddenly starts to make loud noises, or starts to vibrate in an unusual way, stop the product immediately. Contact a Fantech representative as the product will need to be replaced.

Note:

For quiet operation, long life, and to maximize performance, observe the following:

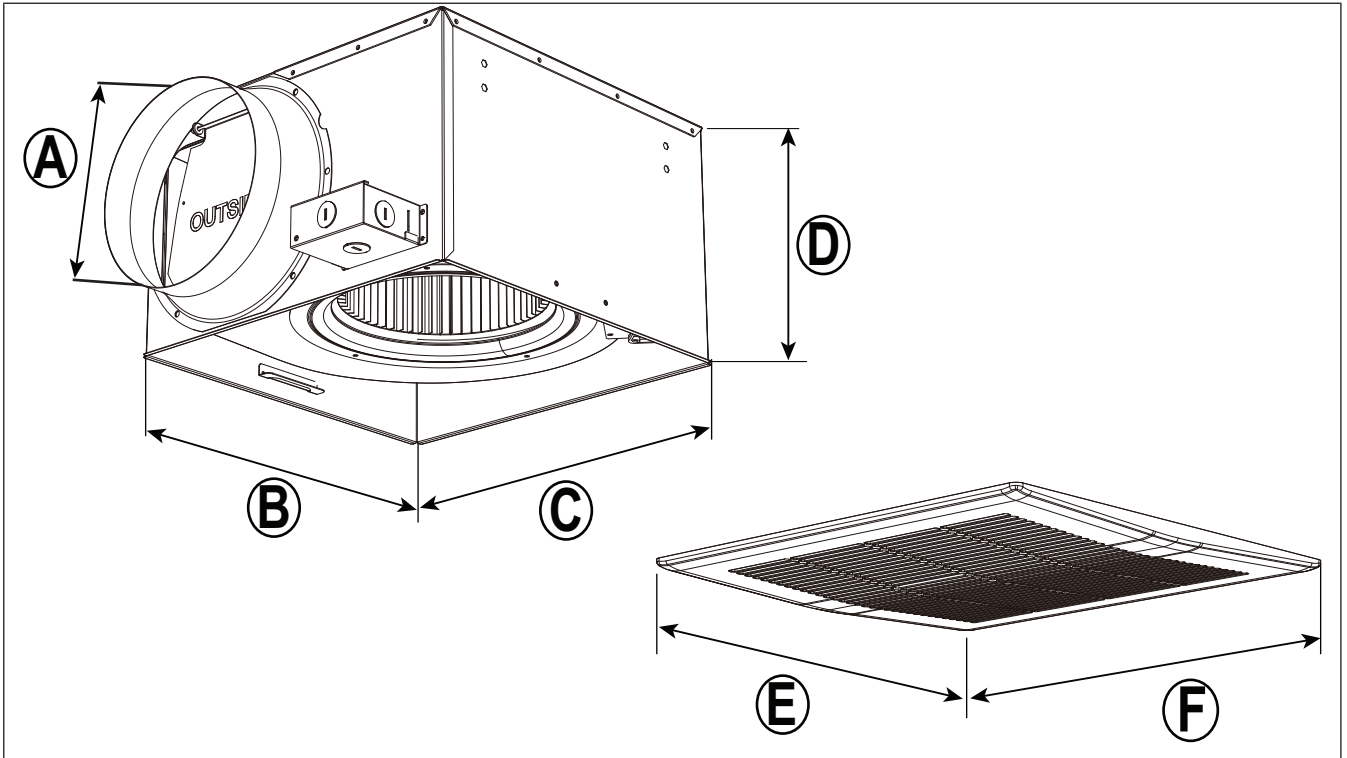
- Remove grille before carefully cleaning interior of product with a vacuum with a soft brush attachment or a soft cloth.
- No other maintenance is required.

7 Technical data

7.1 Technical Data Overview

Voltage, Motor Power, Frequency	Refer to the motor nameplate on the blower assembly.
Motor data	Refer to the motor nameplate or the technical documentation from the motor manufacturer.

7.2 Product Dimensions



Note:

Dimensions are given in inches (mm).

	A	B	C	D	E	F
bathfan Commercial COM200-300-400-500, #484320	8 (203)	14-1/8 (359)	14-1/8 (359)	9 (229)	15-1/2 (394)	16-1/2 (419)



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