



CENTRIFUGAL FANS
User's manual



VENTS **VK**
VK EC series



Disconnect the fan from power supply prior to any connection, servicing and repair operations.

Only duly qualified electricians with valid electrical permit for electric operations at the units with operating voltage up to 1000 V are allowed for mounting and maintenance. Read the user's manual carefully prior to any operations!

The single-phase power mains must comply with the acting local electrical norms and standards.

The fixed electrical wiring must be equipped with an automatic circuit breaker.

The fan must be connected to power mains through an automatic circuit breaker QF integrated into the fixed wiring system. The minimum gap between the breaker contacts on all poles must be 3 mm.

Check the fan for any visible damages of the impeller and the casing before starting installation. The casing must be free of any foreign objects that can damage the impeller blades. Due to constant improvements the design of some models may slightly differ from those ones described in this manual. While mounting the fan avoid the casing compression!

Do not use the fan in a hazardous or explosive environment containing spirits, gasoline, insecticides, etc. Do not close or block the fan intake or extract vents in order to ensure the efficient air flow stream. Do not sit on the fan and do not put objects on it. The timer circuit is live. The product is allowed to be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge provided that they have been given supervision or instruction regarding a safe use of the product and understand the risks involved. Do not allow children play with the product. Fan cleaning and maintenance must only be performed by children under adult supervision.



The product must be collected separately at the end of service life.

Do not dispose of as unsorted municipal waste.

Read the user's manual carefully before proceeding with installation works.
Compliance with the manual requirements ensures reliable operation and long service life of the product. Keep the user's manual available as long as you use the product.
You may need to re-read the information on the product servicing.



DELIVERY SET

1. Fan: 1 item
2. Screws and dowels: 4 items
3. Fixing bracket: 2 items
4. User's manual
5. Packing box

BRIEF DESCRIPTION

The products described herein is a centrifugal inline fan for extract or supply ventilation of rooms and premises.

The fans are designed for connection to 4, 5, 6, 8, 10, 12 inch air ducts.

The fan may be equipped with an energy-efficient and high-performance electronically commutated motor (EC motor).

VENTS VK XXX: basic model with power cable and mains plug.

VENTS VK XXX U: modification with a speed controller and electronic thermostat, integrated temperature sensor (Fig. 11).

VENTS VK XXX Un: modification with a speed controller and electronic thermostat, external temperature sensor fixed on 4 m cable (Fig. 11).

VENTS VK XXX P: modification with a speed controller (Fig.12).

VENTS VK XXX EC: modification with an EC motor.

VENTS VK XXX EC P: modification with an EC motor, integrated speed controller.

XXX: spigot diameter.

The fan design is regularly improved, so some models may slightly differ from those ones described in this manual.

OPERATION GUIDELINES

The fan is rated for connection to single-phase AC power mains 120 V/60 Hz.

For operation of the VK XXX EC fans it is recommended to use the R-1/010 speed controller with smooth speed control. R-1/010 is not included in the delivery set and is available as a specially ordered accessory. The speed controller must be wired in compliance with the wiring diagram in Fig. 9.

The fan is designed for continuous operation connected to power supply.

The arrow on the fan casing must match the air direction in the system.

Ingress protection rating against access to hazardous parts and water ingress is IPX4.

The fan is rated for operation at the ambient temperature ranging from 34 °F up to 113 °F

Suitable for working airstreams up to 149 °F

The unit is rated as a class II electric appliance.

CONTROL LOGIC

VK U (Un) model s equipped with the electronic TSC module (speed controller with electronic thermostat) for automatic speed control (air capacity regulation) depending on air temperature (Fig. 11).

The terminal compartment incorporates 2 control knobs:

- for setting the fan speed;
- for setting the thermostat set point.

The thermostat operating LED light is located on the fan casing. It glows as air temperature exceeds the set point. To set the thermostat set point rotate the temperature control knob clockwise to increase or counter-clockwise to decrease the temperature set point accordingly.

To set the fan speed (air capacity) rotate the speed control knob in the same way.

temperature-based functioning is used to keep air temperature to within 4 °F. In this case the fan switches are rare. The fan switches to the maximum speed as the room air temperature exceeds the set point.

As the room air temperature drops down 4 °F below the temperature set point or if the initial temperature is below the set point, the fan operates with the set speed.

VK (EC) P is equipped with a speed controller that enables switching the fan on/off, smooth speed (air flow) control from minimum to maximum value (Fig. 12).

MOUNTING

The fan is designed for horizontal and vertical installation on the floor, on the wall or on the ceiling (Fig. 2).

While mounting provide extra protection against moisture ingress, as shown in Fig. 2:

1. An outer hood to prevent water ingress inside the fan for vertical installation.
2. A straight 1 m air ducts segment on both sides of the fan for any installation of the fan.

The fan mounting steps are shown in Fig. 3–8. The wiring diagrams are shown in Fig. 9.

Designations:

L: live

N: neutral

QF: automatic circuit breaker

S: external speed switch

X: input terminal block

Automatic circuit
breaker designation



Automatic
circuit breaker



External
speed controller



1

MAINTENANCE

Clean the fan surfaces of each 6 months (Fig. 13–20). Disconnect the fan from power supply prior to any maintenance operations. For cleaning the fan use a soft cloth or a brush wetted in a mild detergent solution. Avoid water dripping on the electric components (Fig. 41)! Wipe the fan surfaces dry after cleaning.

TRANSPORTATION AND STORAGE RULES

Transportation with any transportation vehicle in the manufacturer's original package. Store the delivered product in the manufacturer's original packing box in a dry ventilated premise with the temperature from 41oF up to 104oF and relative humidity below 80 %. The storage environment must not contain dust, acid or alkali vapours that may cause corrosion of the product parts.

MANUFACTURER'S WARRANTY

Production meets standard operating requirements in the territory of the USA and Canada.

Manufacturer guarantees normal operation of the unit during 60 months from the date of retail sale provided compliance with transport, storage, mounting and operation regulations. If the sale date is absent, the warranty period is calculated from the manufacturing date. In case of failure due to faulty equipment during the warranty period the consumer has the right to exchange it.

The unit can be exchanged at the following address:

Bodor Vents, LLC

11013 Kenwood Road Cincinnati, Ohio 45242

Phone: (513)348-3853

e-mail: bodorvents@cinci.rr.com

The manufacturer shall not be responsible for any damages resulting from misuse of the unit or gross mechanical alteration.

The unit owner must follow the guidelines contained herein

The warranty repair does not include:

- Routine technical maintenance;
- Fan installation / dismantling;
- Fan setup.

To benefit from warranty repair the user must provide the fan, the user's manual with the purchase date stamp and the payment document certifying the purchase. The fan model must comply with the one stated in the user's manual.

Contact the Seller for warranty service.

The manufacturer's warranty does not apply to the following cases:

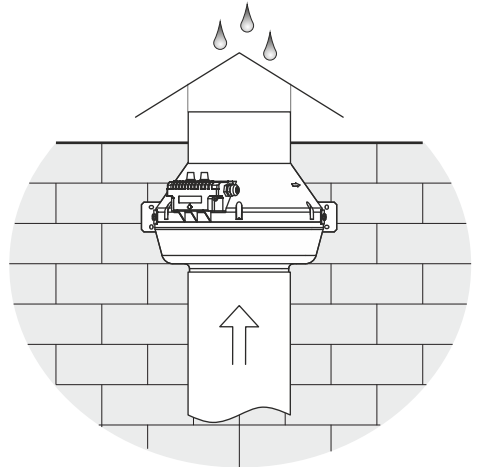
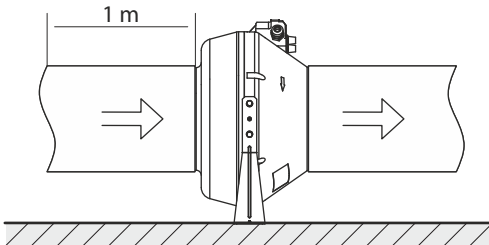
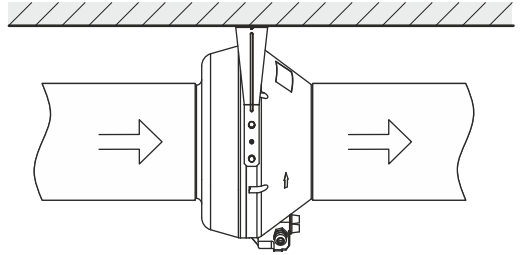
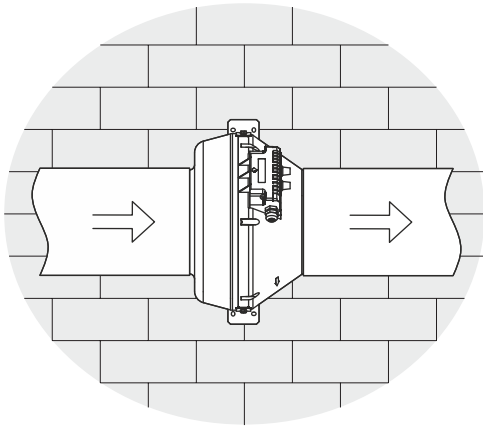
- User's failure to submit the fan with the entire delivery package as stated in the user's manual including submission with missing component parts previously dismounted by the user.
- Mismatch of the fan model and the brand name with the information stated on the fan packing and in the user's manual.
- User's failure to ensure timely technical maintenance of the fan.
- External damage to the fan casing (excluding external modifications as required for installation) and internal components caused by the user.
- Redesign or engineering changes to the fan.
- Replacement and use of any assemblies, parts and components not approved by the manufacturer.
- Fan misuse.
- User's violation of the fan operation regulations.
- Fan connection to the power mains with a voltage different from the one stated in the user's manual.
- Fan breakdown due to voltage surges in the power mains.
- Discretionary repair of the fan by the user.
- Fan repair by any persons without the manufacturer's authorization.
- Expiration of the fan warranty period.
- User's violation of the fan transportation regulations.
- User's violation of the fan storage regulations.
- Wrongful actions against the fan committed by third parties.
- Fan breakdown due to circumstances of insuperable force (fire, flood, earthquake, war, hostilities of any kind, blockades).
- Missing seals if provided by the user's manual.
- Failure to submit the user's manual with the fan purchase date stamp.
- Missing payment document certifying the fan purchase.

The manufacturing company shall be responsible for defects arising through its fault prior to the moment of transferring the product to the ownership of the customer. The manufacturer shall not be responsible for defects arising after transferring the product to the customer and caused by the customer's violating the rules of transportation, storage, assembly and operation of the product, or by actions of third persons, an accident or force majeure circumstances.

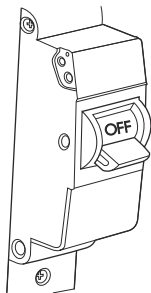
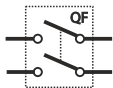
The manufacturer shall not be responsible for damages to health and property of the customer caused by the customer's violating the User Manual or other relevant substituting document; other use of the product by the customer other than its intended use, or by failure of the customer to comply with warnings and other information on the product specified in the User Manual or other relevant substituting document, or by the customer's violating the transportation, storage, mounting, maintenance and operation regulations.

FOLLOWING THE REGULATIONS STIPULATED HEREIN WILL ENSURE A LONG AND TROUBLE-FREE OPERATION OF THE FAN.

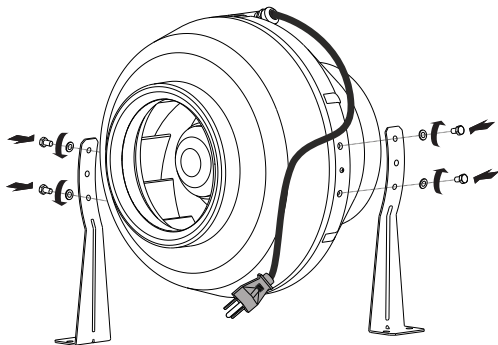
USERS' WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE FAN, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP.



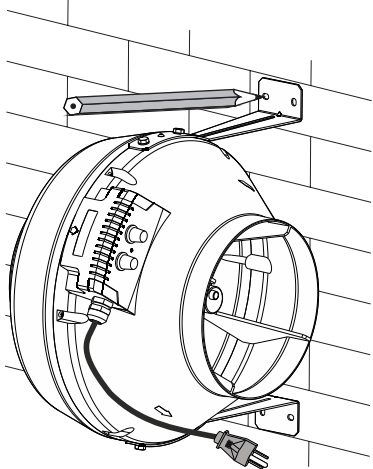
MOUNTING



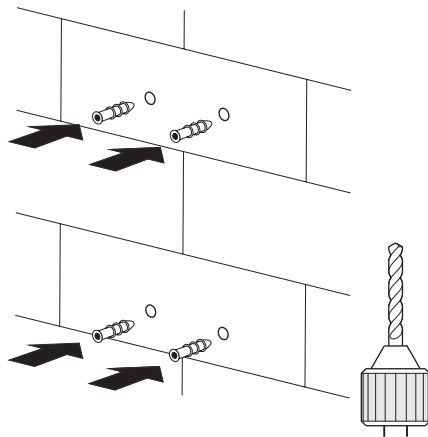
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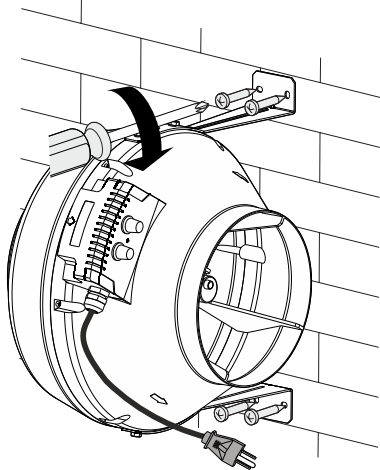
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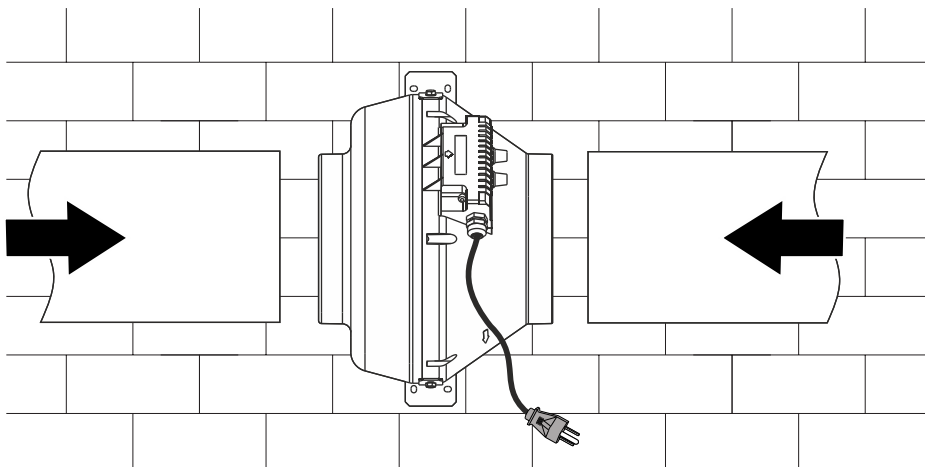
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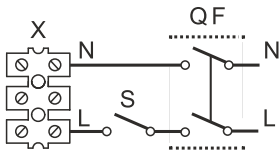
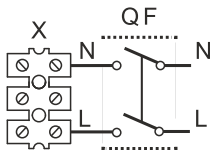


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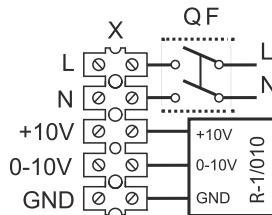


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VK

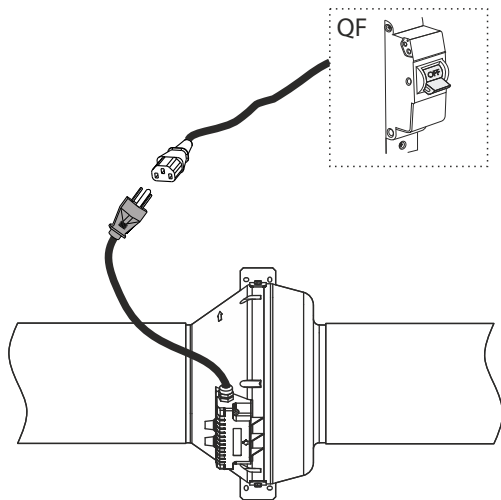


VK EC

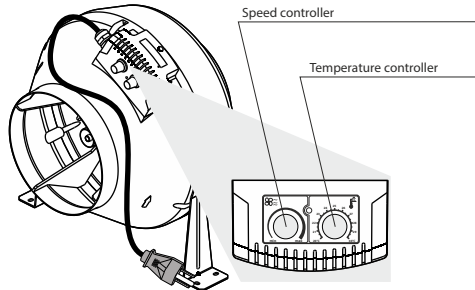


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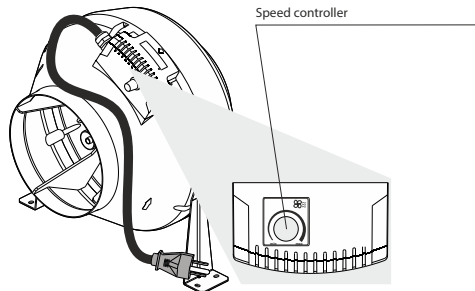
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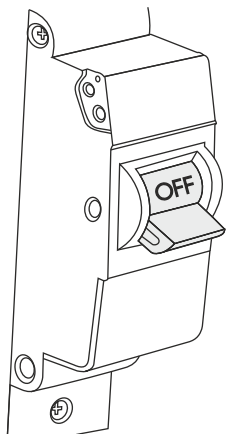
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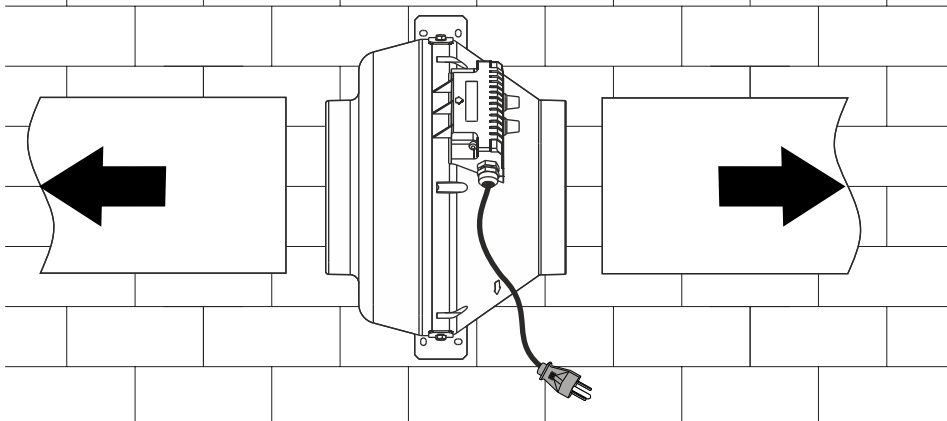


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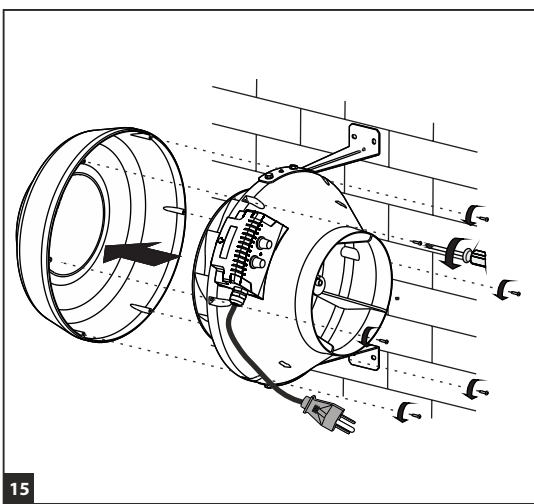


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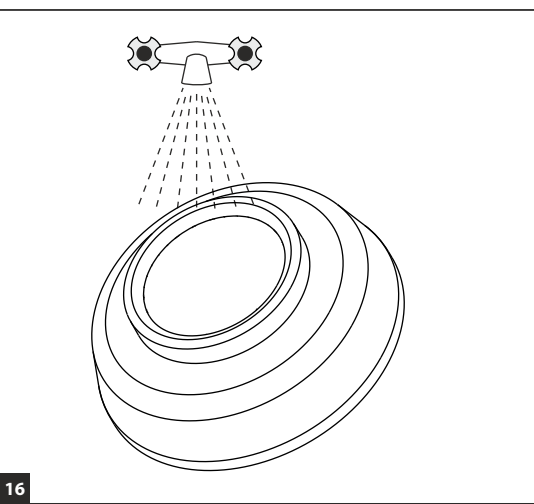
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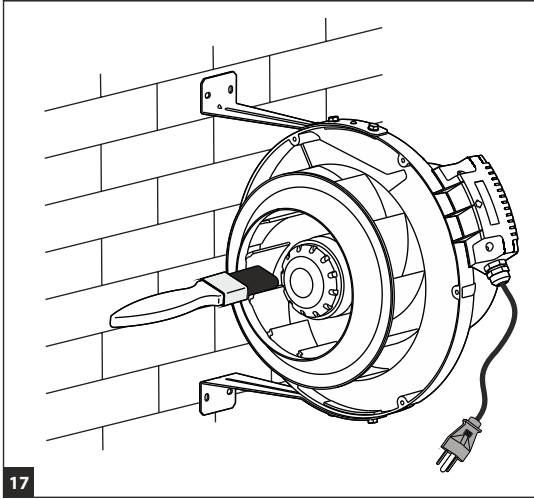
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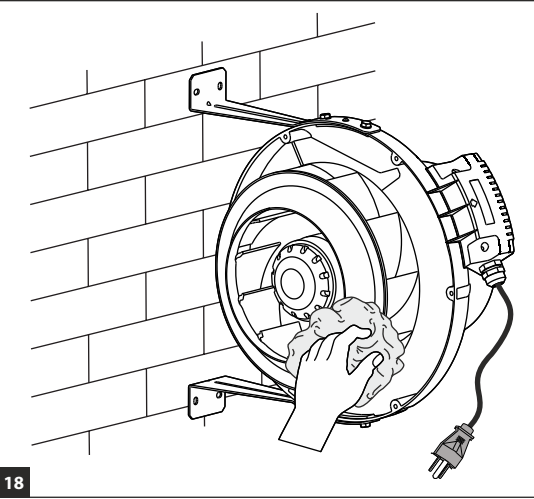
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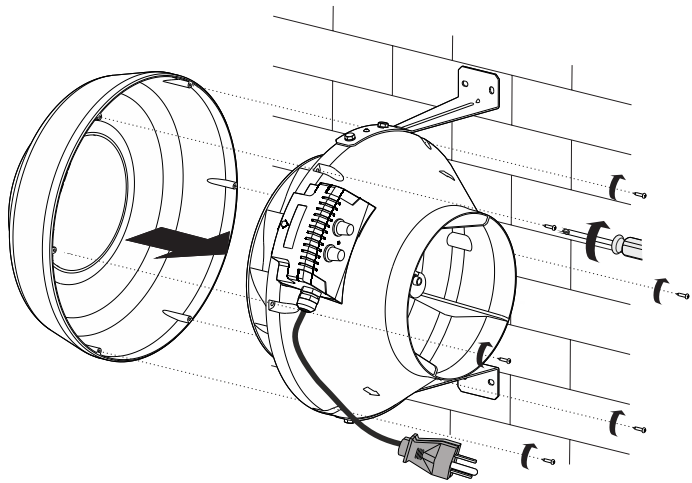
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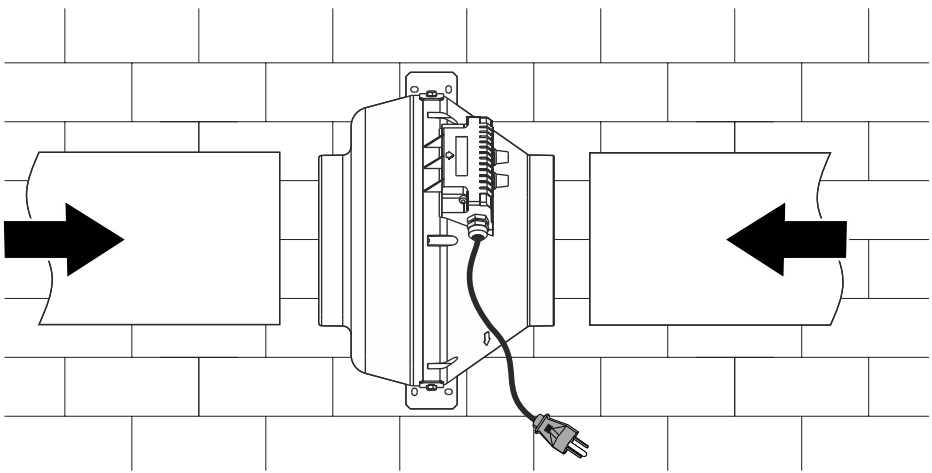
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ACCEPTANCE CERTIFICATE

Approval mark

Sold

(name and stamp of the seller)

Manufacture date

Sales date

100

125

150

200

250

315

VK

EC

U

n

P

The fan is recognized as serviceable.