

# EN R

# **READ AND SAVE THESE INSTRUCTIONS**

#### WARNING!

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, INJURY TO PERSONS, READ THE INSTRUCTIONS CAREFULLY

Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
Before servicing or cleaning the unit, switch off the power at the service panel and lock it to prevent power from being switched on accidentally. When the power can not be locked securely, fasten a prominent warning device, such as tag, to the service panel.

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

4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. 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.
Fans with exhaust ducts must always be vented to the outdoors.

7. This unit may have sharp edges. Use caution to avoid being cut when installing and cleaning. 8. This unit must be grounded.

# CAUTION!

1. For general ventilating use only. For use in non fire rated installations only.

Do not use exhaust hazardous or explosive materials and vapors.

For interior use only. Mount with the lowest moving parts at least 8 feet (2.5 meters) above the floor or grade level.
To avoid motor damage and noisy and/or unbalanced impeller, keep drywall spray, construction duct, etc. off power unit.
Before installation unit one must be convinced of absence of visible damages of impeller and housing. Inwardly housing must not be parts, which can damage to blades of the impeller.

5. Please read specification label on product for further information and requirements.

6. Not for installation by children or any person who is unable to follow these safety guidelines.

7. Connect through switch built into fixed wiring. Gap between breaker contacts on all poles must be not less than 1/8".

Do not close or block unit inlets and outlets in order to allow optimal air passage. Do not sit or put objects on the unit.
Store fan in manufacturer's packaging in ventilated room at temperatures between 41 and 104°F and relative humidity not more than 80%. The ambient air in a stockroom must not contain corrosion-provoking dust, acid or alkali vapours.

The fans are in-line mixed type fans designed for extract ventilation of rooms heated in winter time. Fans are made of white plastic. Delivery set includes:

- 1. Fan 1;
- 2. Screws with plugs 4;
- 3. User's manual;
- 4. Packing box.

Fans are compatible with 4" (100 mm), 5" (125 mm), 6" (150 mm) diameter ducts.

- VENTS TT SILENT XXX - the basic fan model, equipped with an integrated speed switch and a power cord with a plug. It is provided with the following operation modes (see fig. 4):

- "0"- turned off, the fan is not operating;
- "I" the fan is operating at minimum speed;
- "II" the fan is operating at maximum speed.

- VENTS TT SILENT XXX S - the fan is equipped with a high-powered motor;

- VENTS TT SILENT XXX U(U1, U2) - the fan is equipped with an integrated speed controller with electronic thermostat, built into the fan's duct temperature sensor, and power cord with plug (fig. 5);

- VENTS TT SILENT XXX Un (U1n, U2n) - the fan is equipped with an integrated speed controller with electronic thermostat, remote temperature sensor fixed on 13 feet cable, and power cord with plug (fig. 5);

- VENTS TT XXX P - the fan is equipped with an integrated smooth speed controller and power cord with plug (fig. 6).

Fans may be mounted either vertically or horizontally (fig. 1).

An air duct should be connected to an inlet flange in case of horizontal fan mounting; a canopy should be installed on an inlet flange in case of vertical mounting. Outlet flange should always be connected to an air duct. Mounting is shown on Fig. 7-16. Air motion must coincide with direction of indicator on the fan case.

To ensure quiet operation of ENERGY STAR qualified in-line fans, each fan shall be installed using sound attenuation techniques appropriate for the installation.

Insulated flexible type duct work (recommended for all bathroom exhaust applications) will result in quieter

operation. We recommend minimum 8' of insulated flexible duct between any exhaust grill and fan for low noise level.

Flexible duct should be connected to the fan with hose clamps (VENTS C series is reccomended), Aluminum Foil Tape or both. All connections should be as airtight as possible to maximize system performance and eliminate air leakage.

When using flexible type duct work, duct should be stretched as tight and straight as possible.

In case you intend to use non-flexible ducts we recommend to install flexible conectors (VENTS VVG series is highly reccomended) which are designed to exclude the vibration transmission from fans to air duct. Remove any insulation from the area where you will be mounting the fan. Insulation should never be installed over any part of an exhaust fan. Keep the insulation at least 3" away from the fan casing.

Input: 120V AC 60Hz. Scheme of fan connection to the power network is shown on Fig. 3. Fans are designed for continuous operation without disconnection from network.

Protection rating from access to dangerous parts and water penetration is IPX4. Fans can be operated at ambient temperatures between +37 ° F and +107 ° F (for the details, please, see the manufacturer's catalog).

Fan surfaces need to be cleaned of dirt and dust regularly by using a soft, wet cloth and mild detergent (Fig. 17-22).

Do not allow liquids to come in contact with the electric motor. Wipe surfaces dry after cleaning.

Fan construction is constantly being improved, that is why some models can differ slightly from those described in this manual models.



Recycle at the end of unit's service life.

Do not dispose of with other trash.

# ELECTRONICS CONTROL LOGIC

VENTS TT SILENT\_\_\_\_U/U1/U2 fan (fig. 5) enable automatic impeller speed (air flow) control depending on the air temperature in the duct. The "n" index models are equipped with a remote temperature sensor on a 13 feet extension cable.

The terminal box cover incorporates two control knobs and two LED light indicators:

- motor speed preset knob;

- electronic thermostat operation threshold knob;

- yellow LED light for electronic thermostat operating status indication;

- green LED light for power supply indication.

To set the thermostat's operation threshold point rotate the thermostat control knob clockwise to increase or rotate counter-clockwise to decrease the thermostat's operation threshold point.

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

The subsequent fan operation depends on the chosen operating mode:

TT SILENT U Operating Mode

Set the minimum air flow required using the speed dial (i.e. impeller speed under temperatures below the thermostat operating threshold). On reaching the pre-set air temperature the motor will switch to a higher (maximum) speed. The fan will switch down as soon as the duct temperature drops 2° below the pre-set thermostat operating threshold. This prevents frequent fan speed changing triggered by crossing the temperature threshold. The above algorithm is used to precisely maintain the desired temperature.

#### TT SILENT U1 Operating Mode

Set the minimum air flow required using the speed dial (I.e. impeller speed under temperatures below the thermostat operating threshold).

On reaching the pre-set air temperature the motor will switch to a higher (maximum) speed and the delay timer will start the 5minute countdown. The motor reverts to the previous (low) speed not earlier than 5 minutes after provided the duct air temperature is lower than the thermostat preset. The minimum switching cycle in this mode is 5 minutes.

### TT SILENT U2 Operating Mode

Set the desired fan speed by turning the speed dial. The fan stops as soon as the duct air temperature reaches the pre-set thermostat operating threshold. On exceeding the pre-set temperature the fan will switch to the pre-defined speed until the duct temperature drops 2° below the thermostat threshold.

The VENTS TT SILENT \_\_\_ P fan (fig. 6) is equipped with a speed controller that enables the fan switching on/off, smooth motor speed (air capacity) regulation within the range of minimum to maximum motor speed.

#### WARRANTY

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

Manufacturer guarantees normal operation of the unit for 60 months from the date of resale, subject to the compliance with transport, storage, mounting and operation rules.

If proof of sales date is absent, warranty period is calculated from the production date.

In case of failure due to faulty equipment 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

Manufacturer is not responsible for damages resulting from misuse of the unit or gross mechanical alteration.

Owner of the unit must follow the guidelines set forth in the manual.













