



INLINE MIXED-FLOW FANS  
User's manual

TT PRO



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This user's manual is a main operating document intended for technical, maintenance, and operating staff. The manual contains information about purpose, technical details, operating principle, design, and installation of the TT PRO unit and all its modifications.

Technical and maintenance staff must have theoretical and practical training in the field of ventilation systems and should be able to work in accordance with workplace safety rules as well as construction norms and standards applicable in the territory of the country.

All user's manual requirements as well as the provisions of all the applicable local and national construction, electrical, and technical norms and standards must be observed when installing and operating the unit.

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

**Only qualified electricians with a work permit for electrical units up to 1000 V are allowed for installation. The present user's manual should be carefully read before beginning works.**

Check the unit for any visible damage of the impeller, the casing, and the grille before starting installation. The casing internals must be free of any foreign objects that can damage the impeller blades.

While mounting the unit, avoid compression of the casing!

Deformation of the casing may result in motor jam and excessive noise.

Misuse of the unit and any unauthorised modifications are not allowed.

Do not expose the unit to adverse atmospheric agents (rain, sun, etc.).

Transported air must not contain any dust or other solid impurities, sticky substances, or fibrous materials.

Do not use the unit in a hazardous or explosive environment containing spirits, gasoline, insecticides, etc.

Do not close or block the intake or extract vents in order to ensure the efficient air flow.

Do not sit on the unit and do not put objects on it.

The information in this user's manual was correct at the time of the document's preparation.

The Company reserves the right to modify the technical characteristics, design, or configuration of its products at any time in order to incorporate the latest technological developments.

Never touch the unit with wet or damp hands.

Never touch the unit when barefoot.

This unit is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the unit by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the unit.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a safety hazard.

If the cord set is damaged, it must be replaced by a special cord set available from the manufacturer or its service agent.

**CAUTION:** In order to avoid a safety hazard due to inadvertent resetting of the thermal cut-out, this unit must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.

Ensure that the unit is switched off from the supply mains before removing the guard.

Precautions must be taken to avoid the back-flow of gases into the room from the open flue of gas or other fuel-burning appliances.



**THE PRODUCT MUST BE DISPOSED SEPARATELY AT THE END OF ITS SERVICE LIFE.  
DO NOT DISPOSE THE UNIT AS UNSORTED DOMESTIC WASTE.**

## DELIVERY SET

Fan	— 1 pc.
Screws and dowels	— 4 pcs.
Plastic screwdriver (for models with a timer)	— 1 pc.
User's manual	— 1 pc.
Packing box	— 1 pc.

## BRIEF DESCRIPTION

The product described herein is a mixed-flow inline fan for supply or extract ventilation of premises. The fan is designed for connection to  $\varnothing$  100, 125 and 150mm air ducts. The unit is equipped with a two speed motor.

## OPERATION GUIDELINES

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

The fan is rated for continuous operation.

The unit is rated as a class II electric appliance.

Air motion direction in the system must match the pointer on the fan casing.

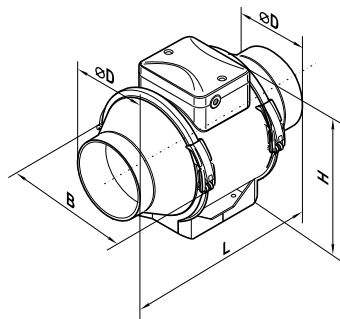
Ingress protection rating against access to hazardous parts and water ingress — IPX4.

The fan is rated for operation at the ambient air temperature from +34 °F up to +104 °F.

Transported air temperature — from -13 °F up to +140 °F.

To comply with the ErP 2018 regulation, a load demand controller and speed controller must be used.

	Ø D	B	H	L
TT PRO 100	97	195,8	226	302,5
TT PRO 125	123	195,6	226	258,5
TT PRO 150	148	220,1	247	289



## INSTALLATION

The fan is suitable both for horizontal or vertical mounting on the floor, on the wall or on the ceiling (Fig. 1). The fan can be installed independently or as part of a set with parallel or in-series connection (Fig. 2).

Install minimum 3.28 ft long air duct on the intake spigot side in case of horizontal fan mounting or a hood in case of vertical fan mounting.

The outlet spigot must always be connected to the air duct. The fan mounting sequence is shown in Fig. 3-11



## CONTROL LOGIC

It is possible to control the fan rotation speed without options by voltage, as well as by thyristor controllers. The speed controller is purchased separately.

### **Warning!**

**When adjusting the voltage, make sure there is no unusual noise or vibration at reduced motor speed.**

**The motor current may exceed the rated current during voltage regulation.**

**The fan is equipped with a thermal switch with no self-reset.**

To reset the thermal relay, switch off the power supply.

Find and eliminate the cause of overheating.

Make sure the motor has cooled down to operating temperature.

Switch on the power supply.

## TECHNICAL MAINTENANCE

The fan surfaces must be regularly cleaned (once in 6 months) from dirt and dust (Fig. 12-19). Disconnect the fan from power mains prior to any maintenance operations. To clean the fan, use a soft cloth or a brush wetted in a mild detergent solution. Do not allow water or liquid come into contact with electric components (Fig. 18). Wipe the surfaces dry after cleaning.

## TROUBLESHOOTING

Problem	Possible reasons	Troubleshooting
When the unit is connected to power mains, the fan does not rotate and does not respond to any controls.	No power supply.	Make sure the power supply line is connected correctly, otherwise troubleshoot the connection error.
	Internal connection fault.	Contact the Seller.
Low air flow.	The ventilation system is clogged.	Clean the ventilation system.
Increased noise, vibration.	The impeller is clogged.	Clean the impeller.
	The fan is not secured well or is not mounted properly.	Troubleshoot the installation error.
	The ventilation system is clogged.	Clean the ventilation system.

## STORAGE AND TRANSPORTATION REGULATIONS

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range +5...+40 °C and relative humidity up to 70 %.
- Storage environment must not contain aggressive vapors and chemical mixtures provoking corrosion, insulation, and sealing deformation.
- Use suitable hoist machinery for handling and storage operations to prevent possible damage to the unit.
- Follow the handling requirements applicable for the particular type of cargo.
- The unit can be carried in the original packaging by any mode of transport provided proper protection against precipitation and mechanical damage. The unit must be transported only in the working position.
- Avoid sharp blows, scratches, or rough handling during loading and unloading.
- Prior to the initial power-up after transportation at low temperatures, allow the unit to warm up at operating temperature for at least 3-4 hours.

## MANUFACTURER'S WARRANTY

Production meets standard operating requirements in the USA and Canada.

Vents US warrants to the original purchaser of the unit that it will be free from defects in materials or workmanship for a period of 24 months from the date of original purchase. The Vents US warrants to the original purchaser of the unit that the integrated control unit will be free from defects in materials and workmanship for a period of 24 months from the date of original purchase.

### **THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

During the stated warranty period, Vents US will, at its option, repair or replace, without charge, any product or part which is found to be defective under normal use and service. This warranty does not cover (a) normal maintenance and normal service or (b) any products or parts which have been subject to misuse, negligence, accident, improper maintenance or repair (other than by Vents US), faulty installation or installation contrary to recommended installation instructions. Labor to remove and replace products is not covered. The duration of any implied warranty is limited to the time period specified for the express warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

### **VENTS US OBLIGATION TO REPAIR OR REPLACE, AT VENTS US OPTION, SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. VENTS US SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH PRODUCT USE OR PERFORMANCE.**

Some states do not allow the exclusion or limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This warranty supersedes all prior warranties. If proof of sales date is absent, warranty period is calculated from the production date. The unit can be exchanged at the following address:

Vents-US  
400 Murray Road, Cincinnati, OH 45217, USA  
Tel: 1-888-640-0925, 513-583-5786, Fax: 513-268-4597  
E-mail: support@ventsus.com  
www.vents-us.com

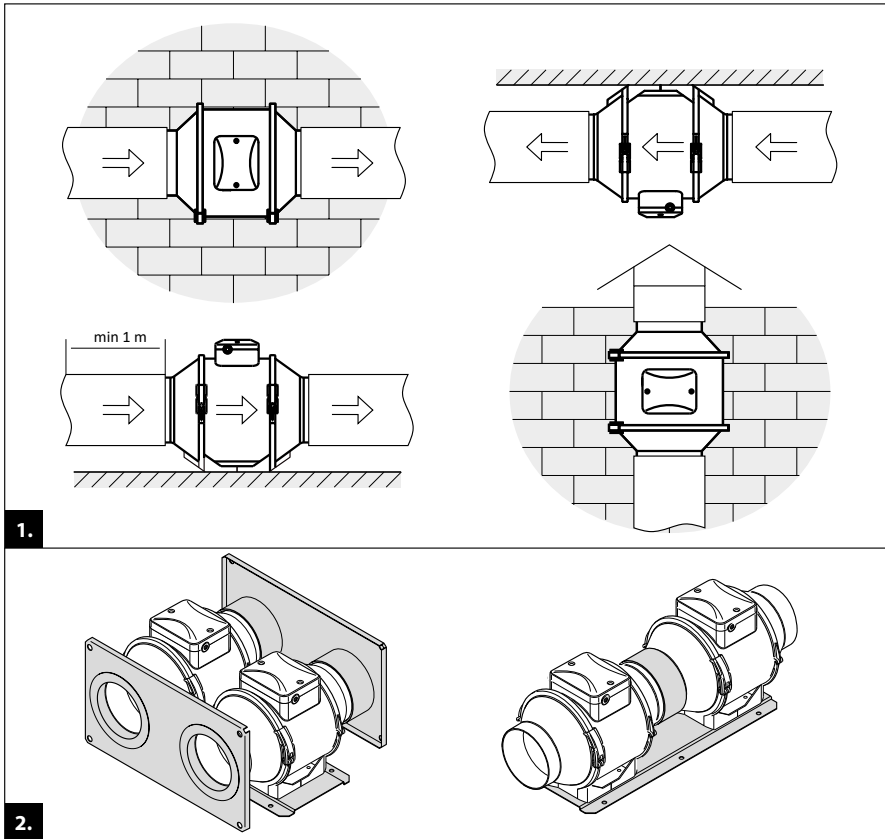
Please follow guidelines in this manual for product problem-free operation.

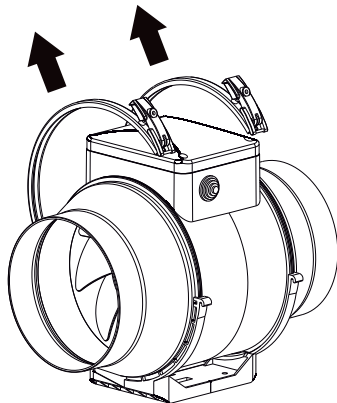
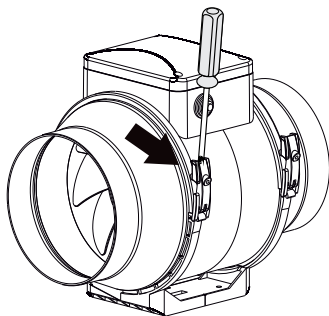
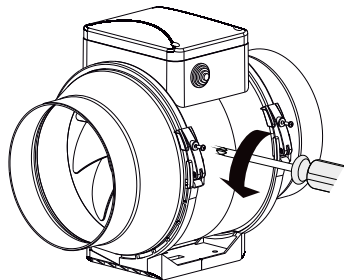
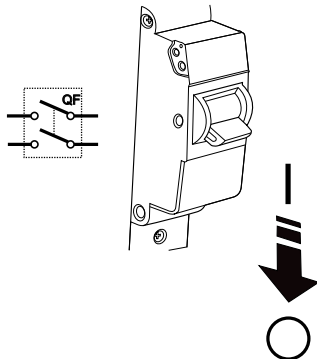


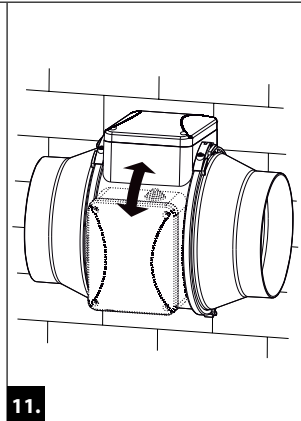
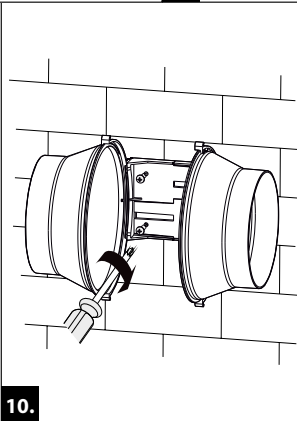
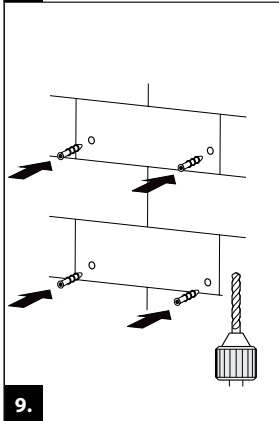
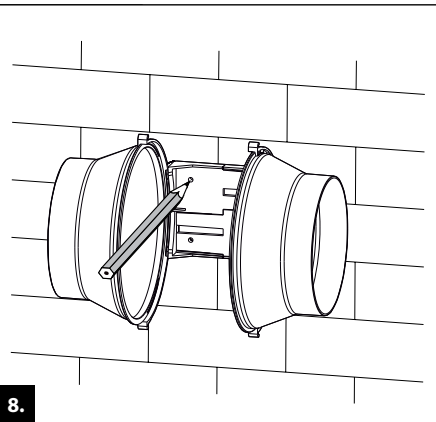
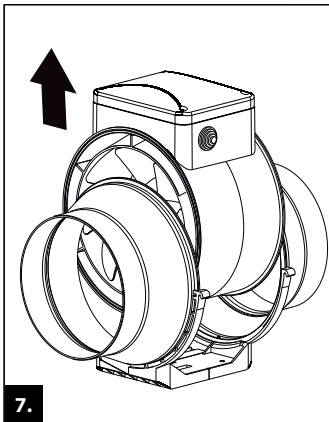
**FOLLOWING THE REGULATIONS STIPULATED HEREIN WILL ENSURE A LONG AND TROUBLE-FREE OPERATION OF THE UNIT.**

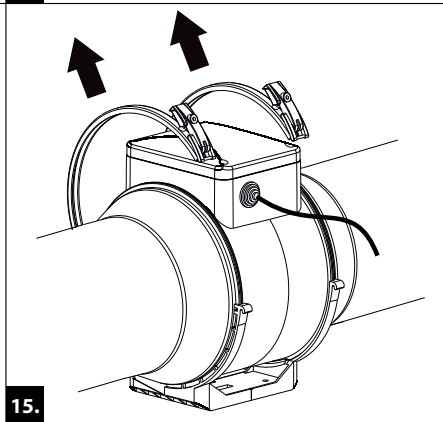
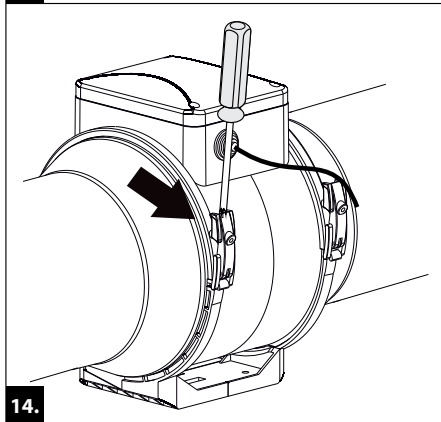
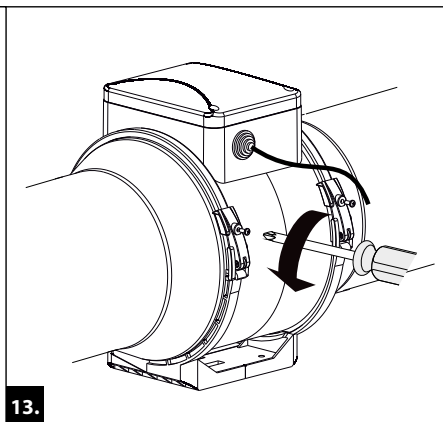
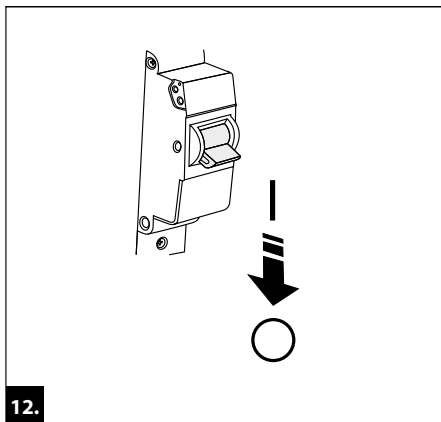


**USER'S WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE UNIT, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP.**

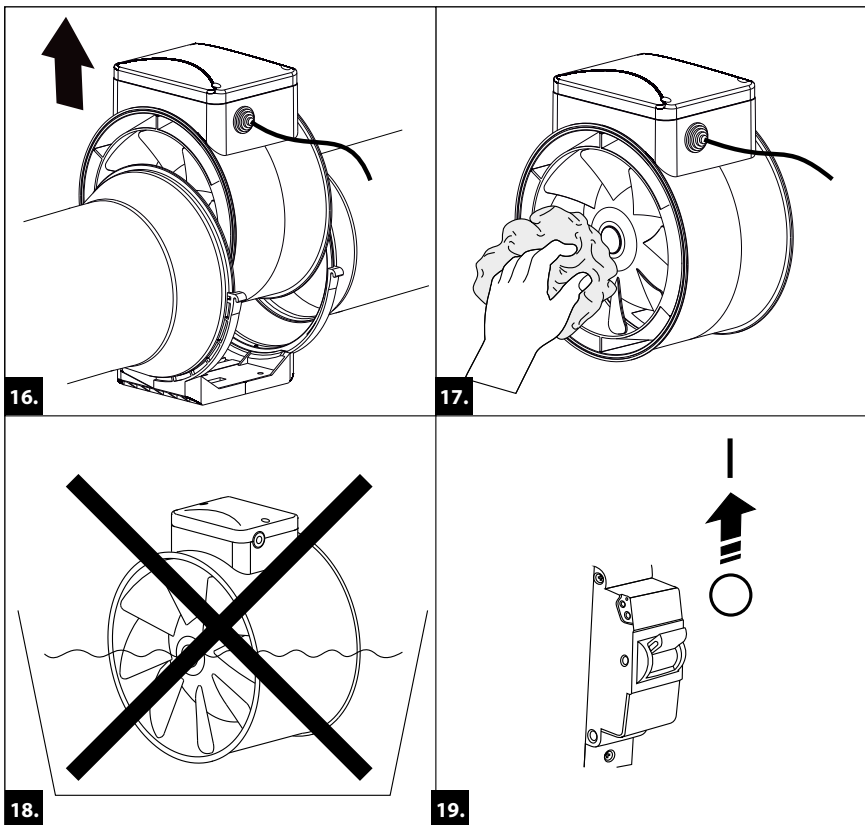






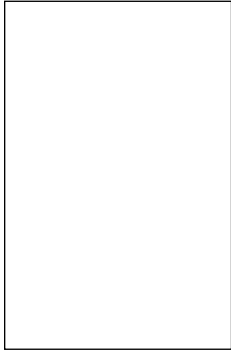




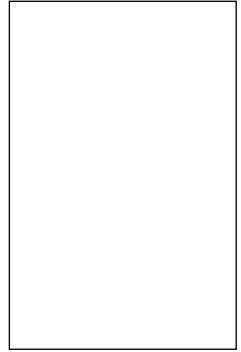




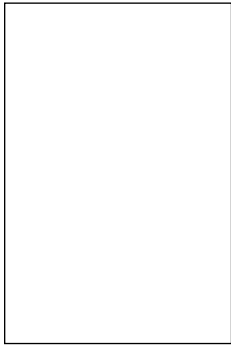
Quality Inspector's Stamp

A large, empty rectangular box with a thin black border, intended for a quality inspector's stamp.

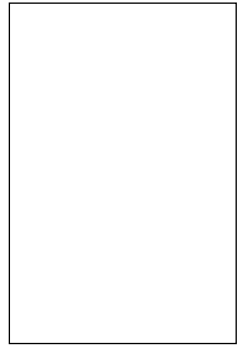
Sold by  
(name and stamp of the seller)

A large, empty rectangular box with a thin black border, intended for the seller's name and stamp.

Manufacture Date

A large, empty rectangular box with a thin black border, intended for the manufacture date.

Purchase Date

A large, empty rectangular box with a thin black border, intended for the purchase date.

Certificate of acceptance

**TT PRO** \_\_\_\_\_

The fan is recognized as serviceable