



## FAN SPEED CONTROLLER

“VENTS RS-1-400”

TROUBLE	PROBABLE CAUSE	METHODS OF REMOVAL
The unit does not operate.	No or limited connection.	To control correctness of connection to electricity network (see paragraph “Mounting and Operation Guidelines”).
	Fuse is out of order.	To replace the fuse. Type – tubular fuse (5x20) – 3.15 A
If controller is switched on, the fan does not operate.	Minimal rotary speed of fan was set incorrectly.	To regulate the minimal rotary speed of fan.

Table 1. Typical troubles and methods of their removal

### STORING GUIDELINES

Controller should be stored in manufacturer's packing box in good ventilated area with temperature range from 0°C to +40°C and relative humidity of air not exceeding 80% (with T=+25°C).

### MANUFACTURER'S GUARANTIES

Manufacturer guarantees normal operation of the unit for 12 months from the date of resale, accordingly to the transport, storage, mounting and operation rules described in the present manual.

We hereby declare that the following product complies with the essential protection requirements of Electromagnetic Council Directive 2004/108/EC, 89/336/EEC and Low Voltage Directive 2006/95/EC, 73/23/EEC and CE-marking Directive 93/68/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. This certificate is issued following test carried out on samples of the product referred to above. Assessment of compliance of the product with the requirements relating to electromagnetic compatibility was based on the following standards.

Owner of the unit must follow the guidelines set forth in the manual. Manufacturer is not responsible for damages (as well as to health of persons) resulting from misuse of the unit or gross mechanical alteration.

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 by the Seller.

### PURPOSE

Thyristor speed controller RS-1-400 hereinafter referred to as “controller” is purposed for slide control of rotary speed of fan with receipt capacity up to 400 VA. The rightmost position of control knob (if rotated clockwise) provides maximal rotary speed of fan. If rotated anticlockwise, control knob decelerates rotary speed. The leftmost position of control knob (if rotated anticlockwise) is followed with a snap of the switch, and controller will switch off the fan to the position “off”.

### BASIC SPECIFICATIONS

Electric parameters of the controller:

- operating voltage - ~220-240 V / 50-60 Hz;
  - load current 1.8 A;
  - maximum capacity of load connected 400VA.
  - overall dimensions 78\*78\*63 mm;
  - weight 250 g;
  - level of protection ensured by the housing (only from the front panel) IP40;
- Temperature required for normal operation of the controller must be in the range 0°C to +35°C with relative humidity not more than 80% (if T=+25°C).

### DELIVERY SET

Delivery set includes:  
Controller 1 piece;  
Registration certificate;  
Packing box.

### SAFETY REQUIREMENTS

Maintenance and mounting must be performed only by persons authorized for independent operation of electrical units of up to 1000 V and after careful study of this maintenance manual.

**ATTENTION!** All circuits in controller are under voltage.

Maintenance and mounting must be performed only after its disconnection from power supply. Forbidden:

- to operate controller with mechanical damages of case and connectors;
- ingress of moisture and water drops onto controller case;
- mounting of controller close to heating elements;
- availability of explosive and corrosive agents in the ambient air.

### MOUNTING AND OPERATION GUIDELINES

Controller must be mounted on vertical wall inside the premises and in hidden latent mounting box. Connection to electricity network must be performed only through automatic switch.

To connect the controller to electricity network (see Fig. 1):

- to dismount controller knob (1);
- to unscrew the mount nut (2) of upper cover and remove the upper cover (3);
- to unscrew the mount screws (4) connecting controller to mounting box, and to dismount controller (5);
- to install connectors to mounting box (6);
- to place mounting box onto the wall;
- to skin the wires ends for 6-7 mm;

### ACCEPTANCE CERTIFICATE

Speed controller is accepted as ready for operation

Model  
“VENTS RS-1-400”

Date of manufacture

Sold name of trading company, shop's seal

Inspector's seal

Date of sale

- to connect wires to terminal block located on controller board according to connection scheme (Fig. 3) and label on terminal block;
- to place controller into the mounting box in a way to locate terminal block on top (see Fig. 2) and fix with screws;

For normal operation of fan it is necessary to regulate minimal rotary speed.

For this:

- turn control knob anticlockwise to extreme position while controller is in switched-on mode (without turning to snap);
- provide electric supply;
- rotate potentiometer slide with isolated handle screwdriver (see Fig. 2) until rotary speed gets minimal;
- switch the controller to "switched off" mode (turn anticlockwise until the sound of snap), wait for fan rotation stop;
- switch the minimal speed of fan, now fan operates on stable minimal rotary speed.

**ATTENTION! To prevent fan damages it is strictly forbidden to operate the unit if minimal rotary speed was set incorrectly.**

- put on the upper cover and tighten the mount nut;
- place back the controller knob.

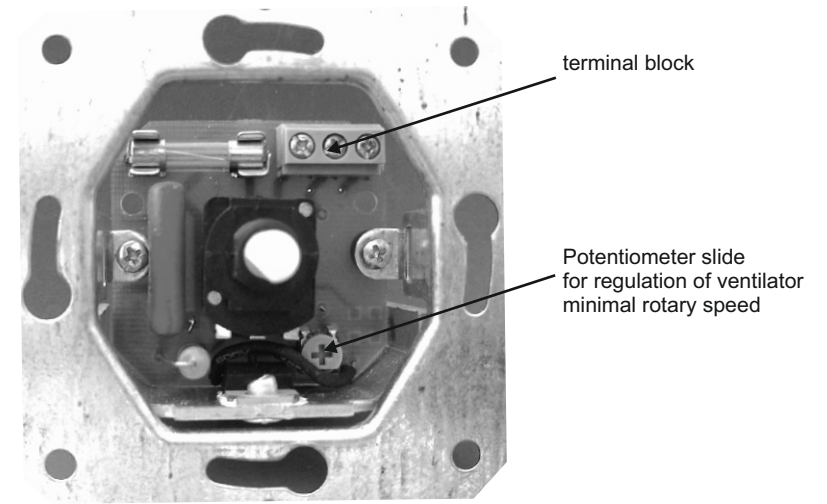


Fig. 2 Regulation of minimal rotary speed

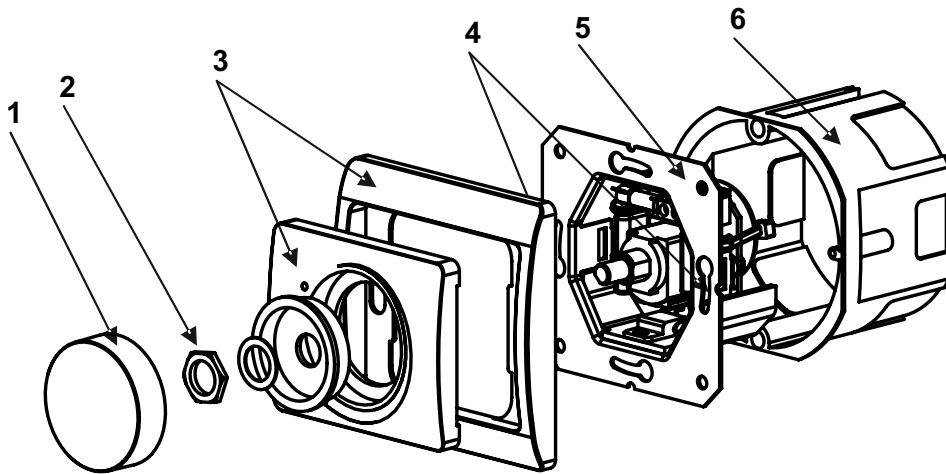


Fig. 1 Controller construction

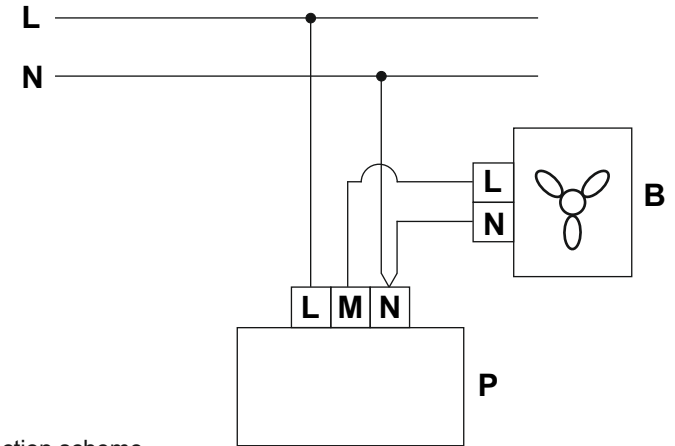


Fig. 3 Controller connection scheme

Keys to scheme:  
 B - fan  
 P - controller RS -1-400.

#### TYPICAL TROUBLES AND METHODS OF THEIR REMOVAL

Controller starts working immediately after connecting to voltage. If the unit does not operate, it is necessary to perform troubleshooting with the help of Table 1.