# **STORAGE**

Store the thermostat in the manufacturer's original packing box in a closed ventilated premise with the temperature ranging from +5°C to +40°C and the relative humidity less than 80% (at 25°C)

# **MANUFACTURER'S WARRANTY**

Manufacturer hereby guarantees rated performance of the thermostat within 12 months since the date of its sale in accordance to the rules of transportation, storage, assembling and operation. The warranty does not cover mechanically damaged goods. In case of no confirmation of the sales date the warranty period is calculated from the production date. In case of any failures due to faulty manufacturing during warranty period, the Customer has the right to have the goods replaced at the Seller's manufacturing facility.

# WARNING!

Manufacturer can not be held responsible for material or physical damages (includings those related to health of the users) resulting from the unit misuse or gross mechanical effect. The thermostat user should follow the manual instructions.

# **ACCEPTANCE CERTIFICATE**

The thermostat has been duly certified as serviceable.

Model "TS-1-90" Manufactured on (date):

Sold

Trade company name and stamp

Stamp of the acceptance inspector

Date of sale:

V60EN-01





# EXTERNAL TEMPERATURE REGULATOR

"VENTS TS-1-90"

# **PURPOSE**

External temperature regulator TS-1-90, further referred as the thermostat, is applied for regulation of the air temperature inside the air ducts and control of chimney fans KAM 125, 140, 150, 160 Eco and KAM 125, 140, 150, 160 EcoDuo T1.

The thermostat contacts are switched as a function of the temperature increase.

The thermostat is designed for installation into the mounting box.

# **BASIC TECHICAL DATA**

Switch contact type: Voltage-free, single-pole, break-make contact

switching voltage 16A, 250 V AC

max.power 500 W

Electrical load type inductive, active

Sensitive element type liquid Temperature differential 4°C

Regulated temperature range 0°C ...+90°C Thermostat overall dimensions 55 x 56 x 56 mm

Capillary tube length

Minimum capillary tube bending radius

Temperature probe

6,5 x 95 mm

# **Operating conditions**

Maximum environmenal temperature +80 °C
Relative humidity no more 80%
Maximum capillary tube and probe temperature +150°C
IP protection rating IP40

Explosive and corrosive admixtures are not allowed in the ambient air.

To connect the thermostat use the fast-on flat terminals, e.g. flatplug 6,3 x 0,8.

#### **DELIVERY SET**

The delivery set includes: thermostat - 1 pce; control knob; decorative cover with fastenings; user's manual; packing box.

# **SAFETY PRECAUTIONS**

Only a qualified electrical technician is allowed to install the thermostat in compliance with applicable acting norms and standards.

# Warning!

The thermostat is on mains voltage while operating. All the electrical mounting works shall be performed when the thermostat is disconnected from power supply network.

#### **DESIGN DESCRIPTION**

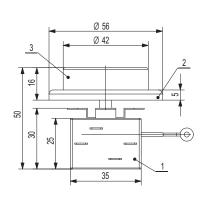
External view and connecting dimensions of the thermostat are shown in fig. 1.

The thermostat consists of the casing 1, decorative cover 2, control knob 3, liquid sensitive element 4 (temperature probe with the capillary tube).

The temperature is measured and regulated by means of the liquid sensitive element. The temperature threshold for the thermostat switching ON is set by means of rotating the control knob. Power for the thermostat is supplied to "C" electrical contact.

If the temperature exceeds the set threshold value the electrical contact "2" is closed thus turning the fan motor on.

The control knob and decorative cover are not shown.



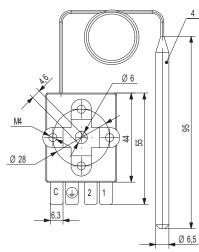


fig. 1

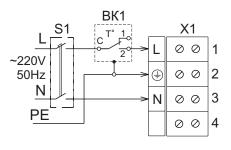


fig. 2

where

S1 - automatic switch;

X1 - terminal block;

BK1 - temperature regulator (thermostat)

(S1 is not included into delivery list)

Power shall be supplied through the switch integrated into fixed wiring system that opens all the phases with the clearance between the open contacts no less 3mm at all poles. The thermostat for the single-speed fan motor models KAM 125, 140, 150, 160 T1; KAM 125, 140, 150, 160 Eco T1 shall be connected to electrical power supply network following the wiring diagram shown in fig. 2; for double-speed fan motor models KAM 125, 140, 150, 160 EcoDuo T1 following the wiring diagram in fig. 3.

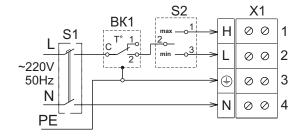


fig. 3

where

S1 - automatic switch;

S2 - thee-position switch:

X1 - terminal block:

BK1 - temperature regulator (thermostat)

(S1 and S2 are not included into delivery list)

# **INSTALLATION AND OPERATION GUIDELINES**

Install the thermostat on the vertical wall in the flush or external mounting box inside the premise. avoid any water splashes, rain drops and direct sunshine rays on the thermostat. Do not install the thermostat directly in the fireplace hood or near other heat sources. The minimum allowable distance from the thermostat to the heat source, i.e. fireplace hood, is 1.5 m.

Do not install the thermostat on the flammable material and do not mount it directly in the firehood place.

#### THERMOSTAT MOUNTING SEQUENCE

Install the thermostat casing into the mounting box, insert and fix the decorative thermostat cover by means of the screws, install the control knob. Install and fix the temperature probe in the air duct.

To connect the thermostat to the electrical power supply network:

disconnect the lead wires from power supply network;

strip the wire leads for 5-7 mm and connect those to the fast-on flat terminals of "Flatplug 6,3 x 0,8 type.

install the flat plugs on the thermostat contacts against stop.

After connecting the thermostat to power supply network turn the temperature control knob counter clockwise to set the required turn-on temperature.