Admission date	Realization date	Signature	REMARKS

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Zakład elektroniczny TATAREK Jerzy Tatarek

USER MANUAL

AUTOMATIC REGULATOR OF MOTOR ROTATION WITH A THERMAL PROBE RT-03C

1. Basic technical parameters:

The regulator measures temperature in the chamber of the fireplace intake fan and sets its rotation by controlling the distribution of warm air.

Power	230V/50Hz
Power consumption	4W
Output load	1A/230V/50Hz
Operation conditions	0-50°C, humidity 10-90% no condensation
Housing protection class	IP20
Thermal probe	KTY84
Max. temperature of the probe	150°C
Temperature measurement range	0°C÷99°C
Temperature measurement error	1°C
Fuse	3,15A/250V
Clamping	subplaster box P2*60

2. Principle of operation

The regulator measures temperature in the chamber of the fireplace intake fan and controls its rotation in 2 modes: Manual (MAN) and Automatic (AUTO).
In the manual mode (MAN) you set the rotation of the fan motor in the range of 0..10 where 0 means the motor switch-off and 10 - max. rotation. Measured temperature doesn't influence the rotation.
In the automatic mode(AUTO) the rotation of the fan motor sets itself automatically according to the measured temperature. Over 40°C the fan turns on ensuring minimal rotation. The rotation increases proportionally to the temperature growth reaching the maximum value at 80°C.
After switching off the power supply (by the switch SIEĆ, or in case of sudden supply voltage decline) actual settings and set rotation value are stored and recovered after resetting the system.
IN CASE OF SENSOR DAMAGE OR ITS NOT CONNECTING THE SYSTEM SIGNALS FAILURE (sound signal, on the display the symbol “E1” blinks).

3. Regulator handling

On the front panel (Fig.1) is the power switch “1”. The display “2” shows measured temperature in the range of 0…99°C and over 99°C the notice “HI”. Depending on the chosen mode the LED “4” (mode AUTO) or “6” (mode MAN) lights. The LED blinks during the blower motor operation.

AUTOMATIC MODE
Setting the regulator to the automatic mode follows after pressing the AUTO button “5”. In this mode the buttons +/- “3” and “8” are inactive.

MANUAL MODE
Setting the regulator to the automatic mode follows after pressing the MANUAL button “7”. For about 5 secs the display “2” blinks showing actual rotation of the blower in the range of 0..10 (0 means the motor switch-off and 10- maximum rotation). The set rotation level can be changed by the +/- buttons (“3”/”8”). At any moment you can press the MAN, + or - button to see on the blinking display the actual rotation of the blower.

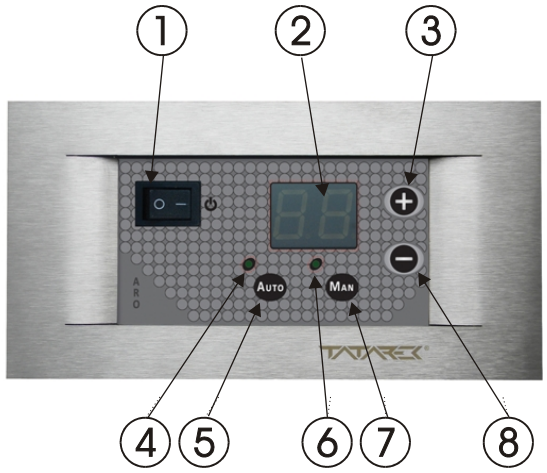

Fig.1. Control panel

1. Power switch
2. Display
3. Upbutton
4. LED of automatic mode
5. Button of automatic mode
6. LED of manual mode
7. Button of manual mode
8. Downbutton

PRODUCENT ZASILACZY SIECIOWYCH
ISO 9001: 2000

CE CONFORMITY DECLARATION

Ref. No. 28.RT.09.2007/1/B

We, ZAKŁAD ELEKTRONICZNY TATAREK Jerzy Tatarek
75 Swieradowska St. , 50-559 Wroclaw

declare under our sole responsibility that
the product: Temperature regulator of the central heating stoves

model: RT-01, RT-02, RT-03, RT-01B, RT-02B, RT-03B, RT-03C

is in conformity with the basic requirements included in Directive EMC 2004/108/WE of 15.12.2004 (the electromagnetic compatibility law of 13.04.07) and Directive LVD 2006/95/WE of 12.12.06 (Laws Journal of 2007 No. 155 pos. 1098) regarding the requirements for electric devices.

To the conformity evaluation the following harmonized standards were used:

PN-EN 60730-2-1: 2002 -	**Automatic electric regulators for house usage and the like. Part 2-1: Specific requirements regarding electric regulators for electric house devices**
PN-EN 60730-1: 2002 -	**Automatic electric regulators for house usage and the like. Part 1: General requirements.**
PN-EN 55022: 2000 -	**Electromagnetic compatibility (EMC)- IT devices Characteristics of radioelectric noises. Acceptable levels and measurement methods**

Complementary information:
Laboratory ZETOM, 17 H. Bednorza st., 40-384 Katowice
Laboratory INSTYTUT LOGISTYKI i MAGAZYNOWANIA
6 E.Estkowskiego st., 61-755 Poznan

Test report No. **B/04/156/1 of 23.07.2004**
B/04/156/2 of 23.07.2004
366÷373/2004 of 01.2005
374÷381/2004 of 02.2005

Electronic Engineering Plant TATAREK
has initiated management system and complies with the following standard :
ISO9001: 2000 CERTIFICATE No. 133/2004 of 01.2004
Polish Foreign Trade Chamber

The last two digits of the year in which the CE marking was affixed: 07

Place of issue: **Wroclaw**

Date of issue: **08.2007**

Manufacturer representative: **Jerzy Kopeć**

Position: **Designer**

WARRANTY

1.Warranty is valid [24] months from the date of sale.
2.Producer does not take responsibility for any mechanical damages made by user.
3.MAKING REPAIRS OR MODYFYING THE DEVICE BY USER IS FORBIDDEN AND CAUSES WARRANTY CANCELATION
4.Warranty card is valid only with date of sale, seller's signature and stamp
5.Warranty and after-warranty repairs should be done only by producer, damaged regulators should be sent to producer in order to make all repairs needed.
6.Warranty protection involves the EU
7.Warranty does not exclude, not restrict and not suspend buyer's rights coming from the incompatibility of the article with the agreement (Laws Journal No. 141 Pos. 1176)

WARNING !

ANY MODIFICATION OF THE REGULATOR MADE BY USER CAN BE THE CAUSE OF SAFETY CONDITIONS DETERIORATION AND CAN EXPOSE THE USER TO ELECTRIC SHOCK OR DAMAGE DEVICES SUPPLIED.

Connection cable of regulator may be replaced only by producer or his authorized service locations

WARNING!
1. Producer does not take the responsibility for damage caused by atmospheric discharge
2. and overvoltage in the mains
3. Burnt fuses are not subject to warranty replacement

Date of sale **Seller's signature and stamp**

Register No.. GIOS: E 0002240WZ

Worn out electronic and electric devices must be transfered to the utilization collection place, where will be accepted for free

ARGO-FILM
Recycling Plant No. 6
180 Krakowska st., 52-015 Wroclaw
ph.: 071 794 43 01,
0 515 122 142

TATAREK®
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Bank account : BZ WBK S.A. O/WROCŁAW 6910901522-0000-0000-5201-9335
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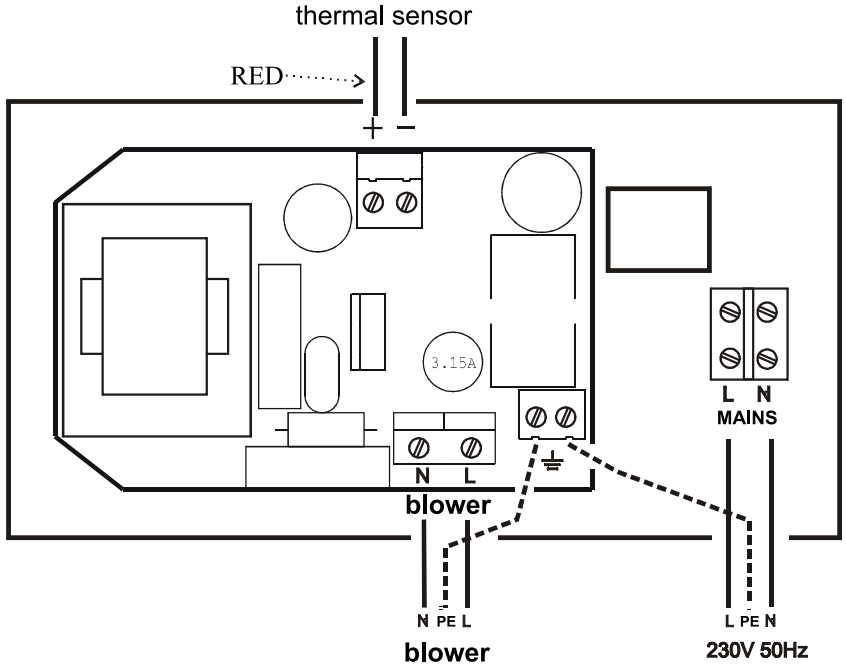
4. Regulator installation

Before connecting the regulator you must make sure the device to be controlled is not supplied and the power supply is 230V.
! The Intake air device should be supplied through the differential part of cutting off the power supply according to the regulations.
! The electrical parameters of the intake air device ought to be in accordance with the technical specification of the regulator (Imax=1A)

The producer doesn't take any responsibility for the damages caused by improper use of the regulator. The best place for the regulator to be installed is a wall next to the fireplace by an electric socket. The regulator must not be installed in a room of temperature over 40°C.
The connection between the power supply and the blower motor is to be done acc. to fig. 2.
The temperature sensor is to be connected acc. to the principle: red/brown cable-> clamp "+", white cable-> clamp "-".



.Fig.2 Wiring diagram

Mechanical installation of the regulator RT - 03C

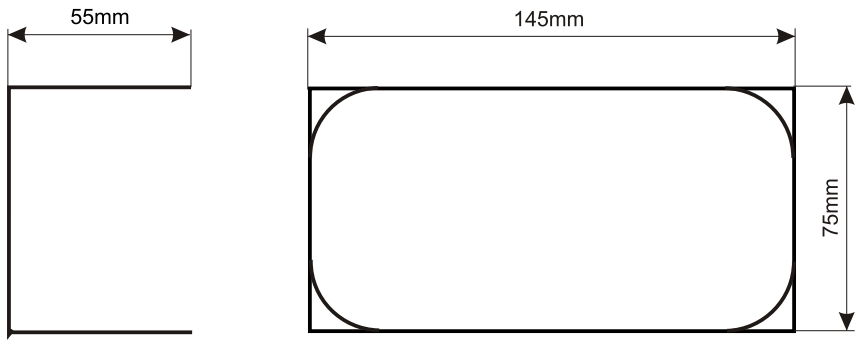


Fig.3 The regulator in-wall opening to fix the double box P2 x 60N

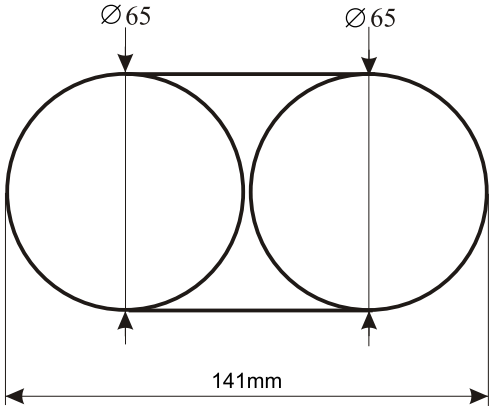
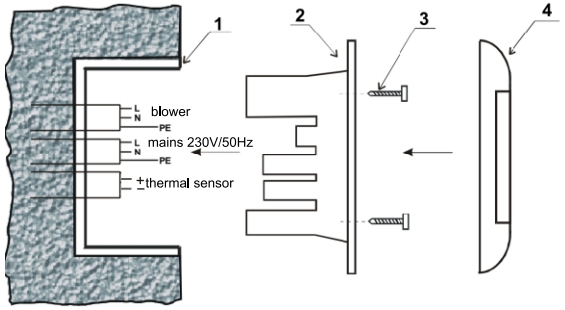


Fig. 4 The regulator in-relief opening to fix the double box P2 x 60N

1. Box P2 x 60N
2. Regulator RT-03C
3. Screws
4. Mask



◆Connect the regulator to the cables driven to the box acc. to the wiring diagram.
◆Insert the regulator into the box P2 x 60 and screw with 4 screws
◆Mount the mask to the regulator

5. Procedure of testing the regulator

Before lighting up the fireplace you must turn on the power and set the manual mode by pressing the MAN button.
With the "+" button you set maximum rotation (value=10) and check if the fan was activated. The MAN light should blink and the temperature of the thermal probe should show up on the display. Then you need to go to the automatic mode (press the AUTO button).
Heating up the probe up to 40°C activates the fan. At 80°C the fan reaches its maximum rotation.

! During the test you must not use open fire (e.g. lighter) to heat the thermal probe, it can damage it. It is recommend that a hairdryer or other warm air source of 200/300°C be used.

6. Adjusting the regulator to the blower motor

You can limit a maximum and minimum rotation of the blower motor by setting up the service mode. You can also select another characteristic of the motor (for the company PRIMECOOLER). Normally the rotation setting minimum=0 and maximum=99 means a full range of speed regulation (100%). The minimum rotation can be increased to the value of 40 (40%) and the maximum rotation can be decreased to the value of 60 (60%).
In order to set the service mode you have to hold pressed the MAN button during turning on the regulator. On the display the symbol "LO" shows up (minimum rotation) alternately with the number of 0…40 range or the symbol "HI" (maximum rotation) alternately with the number of 60…99 range or the symbol "SL". (the choice of the motor characteristic: 0- typical, 1- fans PRIMECOOLER). The values can be changed with the "+/-" buttons and the parameter type "LO/HI" by again pressing MAN.
10 secs without pressing any button causes to get out out of the service mode without storing new settings. In order to store the new settings , press the AUTO button on the display shows up the text "HH" and then the reset of the regulator occurs.

7. Troubleshooting

Problem	Possible cause	Solution
The regulator doesn't work	1. Wrong connection of the cables. 2. Switch SIEC at position 0	1.Check the connections acc. to fig 2 2.Set the SIEC switch to 1
On the display the blinking symbol "E1" appears.	1. Wrong connection of the cables. 2. Damage of the probe	1.Check the connections acc. to fig 2 2.Replace the thermal probe
The fan doesn't work	1. Wrong connection of the cables 2. Manual mode: rotation set at 0 3. Automatic mode: probe temperature under 40C	1.Check the connections acc. to fig 2 2.With the + button set the rotation to 1...10 3.Wait till the temperature is over 40 C