

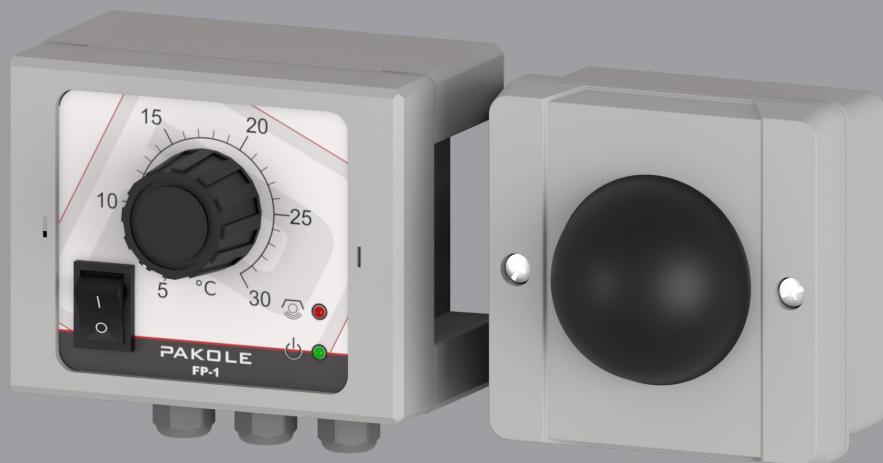


PAKOLE

USER'S MANUAL

FOR INDUSTRIAL USE ONLY

**2-POINT REGULATION THERMOSTAT WITH TEMPERATURE SENSOR,
FOR CERAMIC AND TUBE RADIANT HEATERS**



Regulator type:

FP-1 + SR

www.pakole.com

FP1_009_046_011_210506_V002_EN

EN

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1. SAFETY INFORMATION



ATTENTION! Read and understand this user's manual before assembling, starting, or servicing the device. The improper connection or usage can cause serious damages! Keep this manual in a safe place in order to obtain information in case of incidental problems!



ATTENTION! If the electric cable is damaged, it must be changed by a qualified service person.



ATTENTION! These regulators have been developed for devices manufactured and distributed by PAKOLE Trade Ltd., therefore they cannot be installed in other devices due to their different technical properties

2. GENERAL INFORMATION

The FP-1 type temperature regulator is suitable for controlling **ZENIT** type tube radiant heaters and **GH** type ceramic heaters and the systems built from these devices.



3. DELIVERY, UNPACKING, HANDLING

The regulator is delivered in corrugated cardboard box.

The process of unpacking the device:

- Remove the corrugated paper box and the cover foil from the device.
- Check that the delivered package contains all the accessories.
 - 1 pc Temperature regulator
 - 1 pc Temperature sensor
 - 1 pc User's manual
 - 3 pcs PG 11 sealing bush
- Check the device for transport damage.
- If you notice that the regulator is damaged, inform our retailer immediately from whom you purchased the device!

4. OPERATION PRINCIPLE

The desired temperature can be set using the rotary knob and temperature scale on the controller. The regulator switches the radiating device or devices ON or OFF based on the detected temperature. There is a two-position mode switch on the front panel, which switches the operating mode „I“ ON, in the upper position and OFF „0“ in the lower position.

- In „Heating“ mode, below the set temperature, the thermostat starts the radiant heater or the system of radiant heaters and then switches them off as soon as its temperature reaches the set (desired) value.



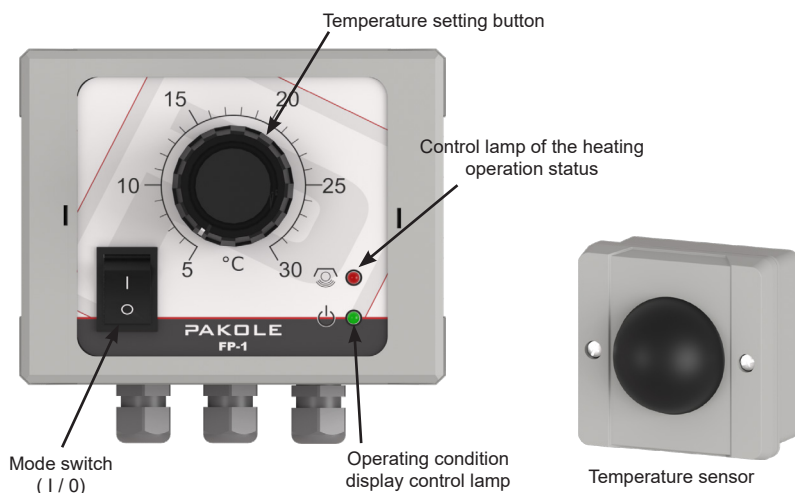
Attention! Setting the mode switch to „0“ does not mean that the temperature regulator or the ZENIT type tube radiant heater or the system built from these heaters are switched off, as the devices remain energized! Disconnect the plug from the regulator to de-energize the device.



Attention! The set temperature is for information only. There may be a difference between the set and the measured temperature.

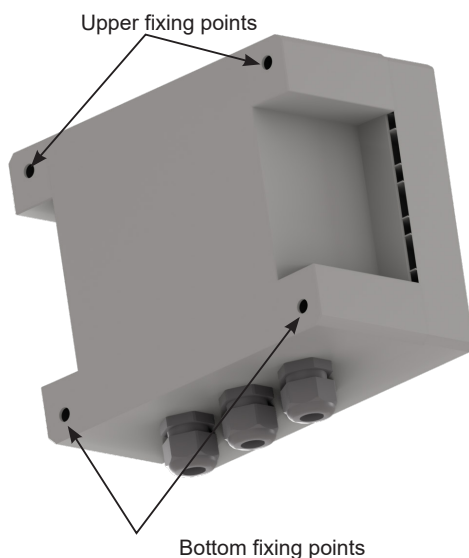
5. APPLIANCE PLACEMENT

TEMPERATURE REGULATOR (FRONT VIEW)



1. fig: Front view of the temperature regulator

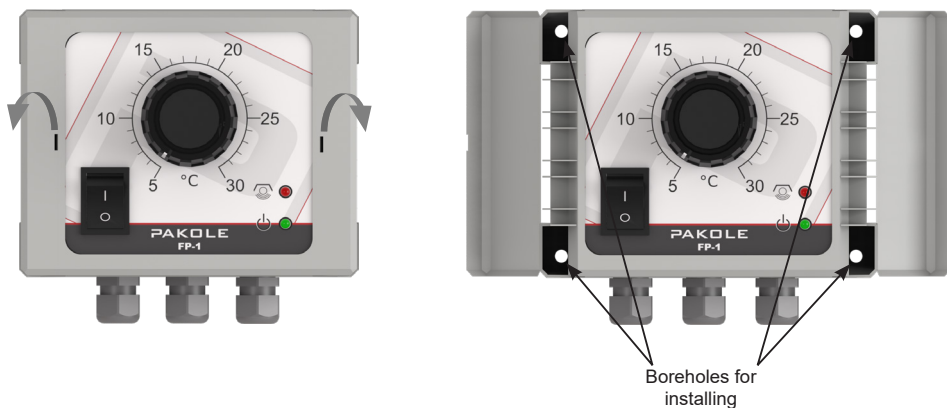
TEMPERATURE REGULATOR (REAR VIEW)



2. fig: Rear view of the temperature regulator

APPLIANCE PLACEMENT

After unpacking the temperature regulator, when the cover on the bottom of the regulator is opened or removed the through holes for mounting the device are accessible.



3. fig: Fixing points of the temperature regulator

In the room, the temperature regulator has to be placed at a height of 1.5 meter so it is protected from any radiation or other heat source.

In case of using radiant heaters the outdoor temperature sensor has to be placed at a height of 1.8-2 meter.



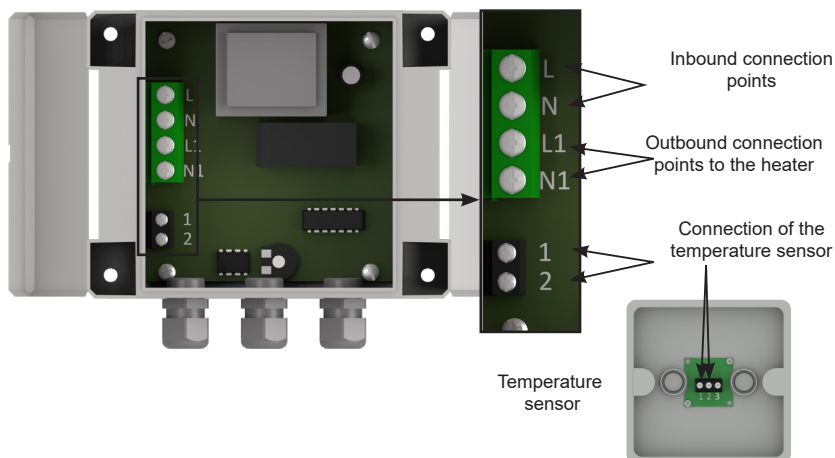
All installation, connection and removal of the box lid must only be carried out when it is devoid of voltage!

6. ELECTRICAL CONNECTION



ATTENTION! Improper connection of the control unit can lead to permanent damage!

Under the lid there is a screw terminal for connecting the regulator. The high voltage connectors has to be connected with an MT 3x0.75 ... 1.5, 400V operating voltage cable. The regulator has reinforced insulation, therefore it does not contain a protective earth connector, the regulator cannot be connected to a protective earth!



4. fig: Connection points of the temperature regulator

When connecting the power supply connection points (L, N) of the regulator, pay attention to be made as on the basis of the figure shown: **The neutral wire must be connected to connection point “N” and the phase wire must be connected to connection point “L”!** Points „N1” and „L1” from the regulator must be connected to the heating device(s) at the N and L connection points.

The temperature sensor must be connected to points 1 and 2 according to the numbering. *The two-pole isolating switch for the power supply in front of the control unit must be selected so that it can be locked in the „0” position.*

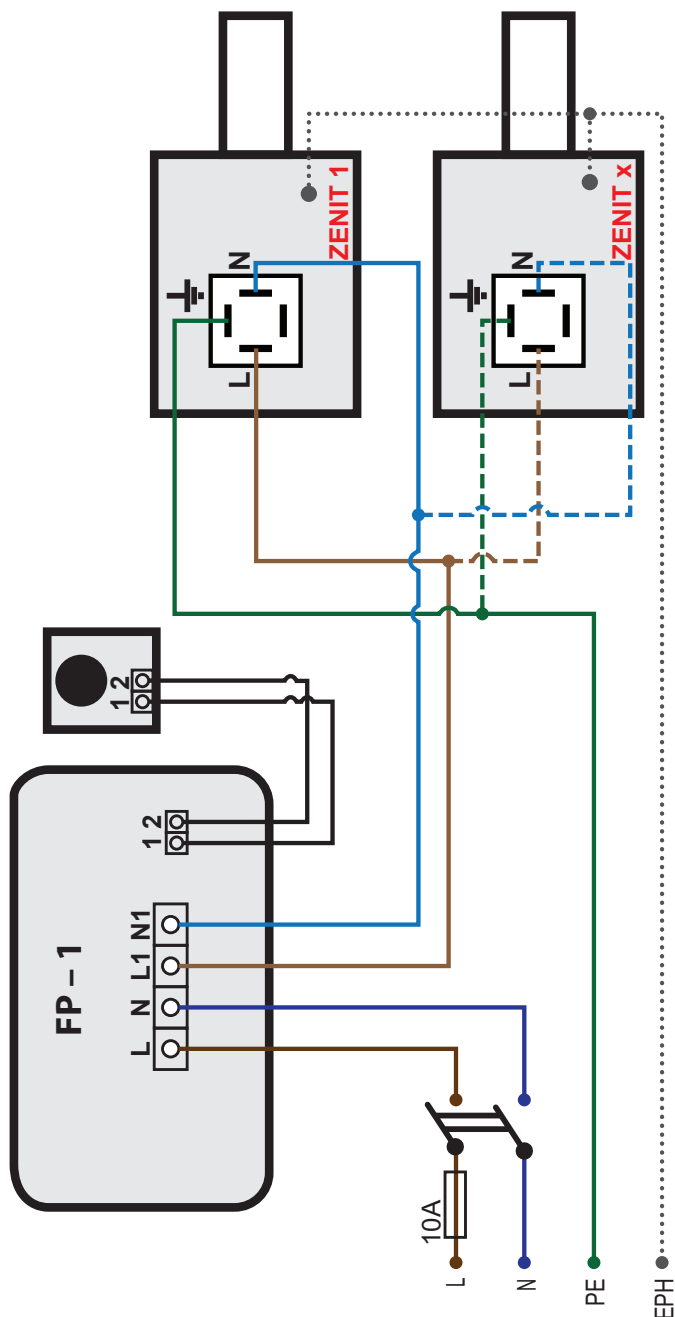
Only with this connection can be ensured that the ZENIT radiant heater works properly.



ATTENTION! Switching the regulator's switch to the „0” position does not free from voltage either the temperature regulator or the heater! The regulator can be de-energized by disconnecting the connector on the device.



The regulator must be connected to the main electrical system with a two-pole isolating switch!



5. fig: Wiring the radiant heaters on the connection panel

7. MAINTENANCE

The temperature regulator does not require maintenance when the set is used functionally. In case of any failure the repairing can be fulfilled only by specialist or professional service!

NOTIFICATION OF TECHNICAL FAILURE:

PAKOLE TRADE Ltd.

H-8000 Székesfehérvár, Börgöndi út 8-10.

Tel.: +36 22 316 484

e-mail: szerviz@pakole.hu

8. TECHNICAL PARAMETERS

TECHNICAL DATA

Power supply:	230V / 50 Hz P _{max} 1VA
Sensor :	NTC regulator - inside cover
Output:	switched by relay output 230VAC / 50 Hz 10A
Control interval:	nature of value-based regulation
Setting value:	+5...+30°C
Protection:	IP 31
Other data:	
House:	plastic
Connection:	through a gland to the screwed connecting strap
Insulation:	II. class
Enclosure size:	120 x 90 x 50mm

WARRANTY - AND SERVICES**Preserve this warranty card**

Type: _____

Serial no.: _____

Date of purchasing: _____

LIMITED GUARANTEE *

The manufacturer guarantee the costumer that the product and its parts are free from material and production fails. During normal use the warranty is 1 year. This warranty concerns the first retail customer.

The guarantee concerns the costs of laboratory investigations and the parts, which are needed for proper operation. The delivery and unforeseeable costs belong also to the mending costs and do not contain compensation costs.

Guarantee mending can only be realized by authorized retailer or service centre.

The guarantee does not concerns the following fails, which are caused by: improper using, damaging, neglect, accident, lack of maintenance, normal attrition, transformation, modification and operation influence factor, contaminated fuel, installation of non-suitable part and mending which is done by not authorized retailer or service station.

The regular maintenance is the owner's responsibility.

The manufacturer does not assume the responsibility in case of accidentally happened or directly caused mistake respectively improper using.

***We reserve the right to change of this specification without extra notification. The guarantee can be applied in accordance with above defined. Additional guarantee is not accepted.**

Guarantee servicing

If your appliance needs guarantee service in that case it can be requested at nearest authorized service station giving in the appliance for repairs. This service is included with the purchase agreement.

Mending services

Take the appliance to the nearest authorized service station. If the device is not under guarantee the service cost will be invoiced to the costumer at defined price. The service centres are independent from one another and may have different owners. We reserve the right to change of this specification without extra notification. If you would like to contact us the type and serial number of device always be at hand.

In case of other needed information write to the following address:

PAKOLE TRADE Ltd.

H-8000 Székesfehérvár, Börgöndi út 8-10.

Tel.: +36 22 316 484 szerviz@pakole.hu



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