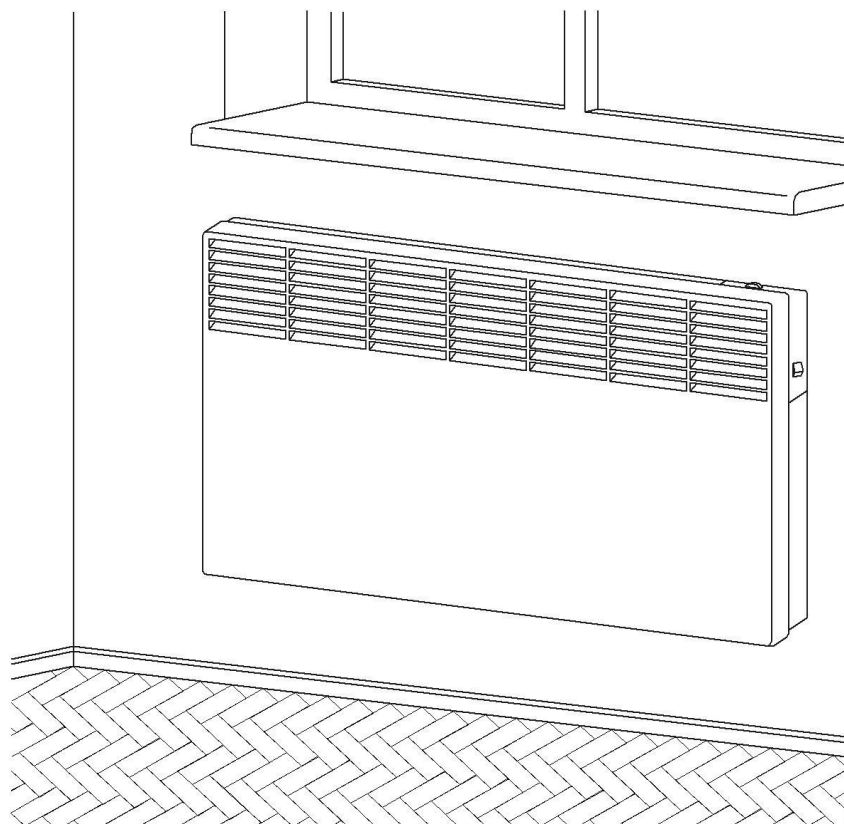


**THERMOVAL®**

**ELECTRIC CONVECTOR  
WITH A POSSIBILITY OF MOUNTING LEGS**

**MODEL TX , T17**



**OPERATION INSTRUCTIONS**



## 1. WARNING!

Before installation and operation, please refer to the "operating Instructions" (hereinafter the "instruction").

In connection with the still ongoing work to improve the quality of the product, the design of products can be changed and not included in this manual, however, does not reduce the performance of the product.

## 2. GENERAL

This manual is designed for convector electric THERMOVAL model T17 and TX (hereinafter referred to as heaters).

Heaters belong to the class of modern heating equipment stationary type, using hot air for heating buildings and building installations.

Radiators with degree of protection IP20 are designed for use in traditional areas. Radiators IP24 protection against water droplets, are intended for use in all types of premises.

Heaters are designed for fixed installation on the wall, but their design also allows for installation on the floor, movable or immovable legs, which are purchased separately. Heaters are provided with a thermostat to adjust and maintain the desired temperature in the room regulator staged output power in a protection against overheating, and protection of rooms against freezing (to keep the room temperature in the range of from + 5 to + 7 ° C. which prevents freezing room while maintaining the lowest level of power consumption). The regime of work - all day, automatically.

When buying a heater, be sure to check that the device is functioning properly and is free from mechanical damage and whether the supplied set of elements is consistent with the list by. p. 3 of this manual. Carefully check the completeness and correctness of the fulfillment of the guarantee and coupons are cleaved and the presence of a stamp dealer. Keep proof of purchase, this manual, warranty card and packaging during the warranty period of the heater. Attached to the radiator while sales documentation in the event of loss can not be restored.

**REMEMBER:** failure to comply with these recommendations, in case of mechanical damage, can lead to loss of the right to warranty service.

## TECHNICAL DATA

Supply voltage,	V 230 ± 10
Frequency	50 Hz ± 1
Class of protection against electric shock	II
The degree of protection provided by the housing	IP 20 or IP 24

Other data reported in Table 1.

Tabel 1

Nominal power consumption, kW	0,5	1,0	1,5	2,0	2,5
Nominal power, A	2,1	4,3	6,5	8,7	10,8
Dimensions, mm, no more than (length×width×height)	400×115×45 5	490×115×45 5	600×115×45 5	740×115×45 5	890×115×45 5

### 3. ELEMENTS

- Heater - 1 pcs.
- Brackets for wall mounting 1 set - 2 pcs.
- Instruction manual - 1 pcs.
- Package - 1 pcs

### 4. SECURITY

Before plugging in the power of the heater it is necessary to visually check the power cord heater does not have mechanical damage. In case of damage, please contact your dealer or service center to replace or eliminate defects. Categorically prohibits the connection of devices to the network, until the damage is repaired.

Heater class II protection does not require grounding.

Unplug the heater when conducting its maintenance, and during the washing on wet surfaces around the device, installed on the floor. Disconnect the heater from the power supply by unplugging the cord from the socket.

You should not allow the penetration of moisture into the interior of the radiator type IP20.

Radiators coated type IP24 must be installed so that the regulating elements were not available for those taking a bath, located in the shower or in the pool.

Protect the device from getting to the inside of foreign objects or paper.

Use the device only for its intended purpose (heater is not intended for outdoor use).

Do not use a heater with a damaged cord. We must be careful that the power cord does not touch the hot surface of the radiator.

To avoid burns, do not touch the bare hand outlet grille and the surface of its environment during operation of the heater.

**WARNING!** In the event of damage to the cord of his replacement should be made by the manufacturer, employee service center or employee with the right qualifications.

Children under 3 can stay near the machine only under constant adult supervision.

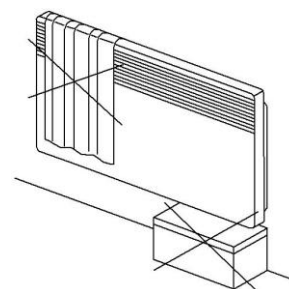
Children aged 3 to 8 years old can only enable or disable the device after making sure that the device is placed or installed in the correct position, and was given instruction regarding the use of equipment in a safe manner. They need to know the risks associated with improper installation and operation of the device. Children aged 3 to 8 years old should not connect the equipment to the power supply, change its settings, perform routine cleaning and maintaining equipment.

**WARNING!** - Some parts of the equipment may be hot and cause burns. It should be kept in the special care when children are present and people with disabilities.

**WARNING!** To avoid overheating, do not cover his radiator.

**NOT ALLOWED:**

- partially or completely block the ventilation holes in the radiator grilles
- place near a heater, inflammable materials and objects
- install the heater directly under the electrical socket
- operate the heater in the immediate vicinity of a bath, shower or swimming pool
- touch the plug or the surface of the heater turned on with wet hands



**5. PREPARING TO OPERATING**

**5.1** - Remove the heater from the box. It is recommended to save the packaging for its further use in case of dismantling the heater and long-term storage.

When storing or transporting the radiator at low temperature (if created with dew drops) before connecting to the mains it is necessary to wait at least 2 hours at room temperature, until it starts.

**5.2** - Specify the location where the heater will be operated. You should not install a heater within, the ventilation holes in the area of direct sunlight.

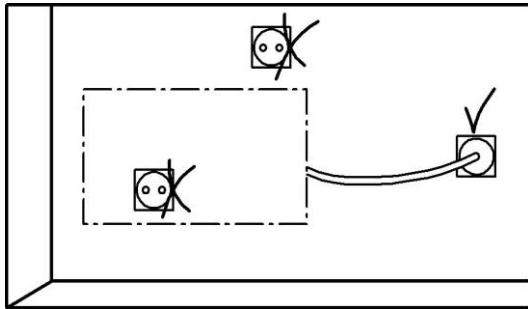
**5.3** - Verify that the technical requirements for the radiator, presented in Chapter 2 of this manual (voltage; protect the system power supply, the quality of cables and sockets, which will be connected to the heater, are relevant for the product. If necessary, please contact dealer or the official service representative.

**5.4** - In the case of stationary installation of the heater must be noted on a wall place the mounting holes (see Figure 1, Table 2), and attach the mounting brackets heater in every way possible to ensure reliability of fixing the entire period of operation and provided that the minimum distance of the radiator to the objects in the room, as shown in Figure 2, 3 (the distance is given in centimeters).

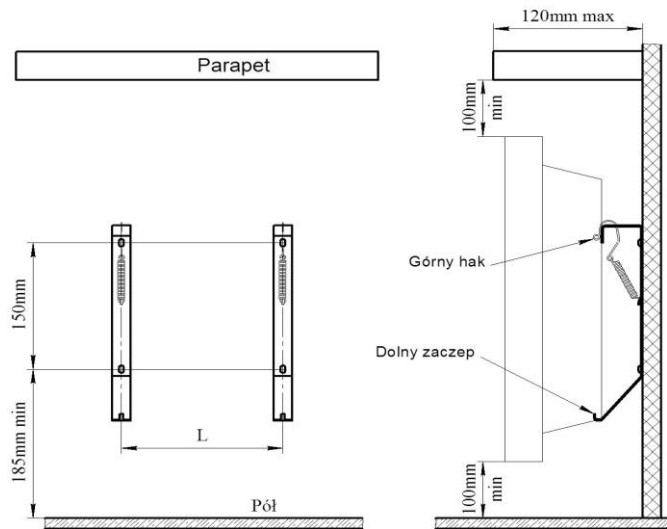
The heater must be suspended on the upper hooks mounting brackets (for this purpose on the rear side of the radiator, there are two rectangular holes), while the lower hooks of the handle must touch the rear wall of the heater (do not use excessive force to avoid damage to the housing or the cover of the radiator). Move the heater up to the entry of the lower hooks grip in the recesses of the lower radiator grille.

Table. 2

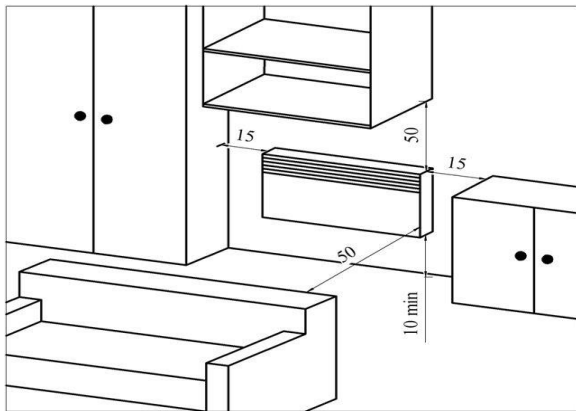
Nominal power, kW	0,5	1,0	1,5	2,0	2,5
L, MM	177	267	377	517	667



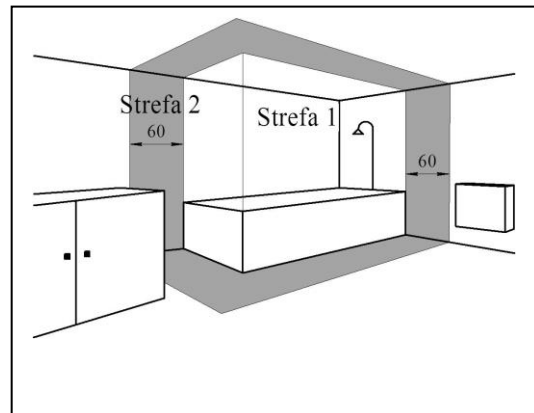
draught.1



draught.2



draught.3

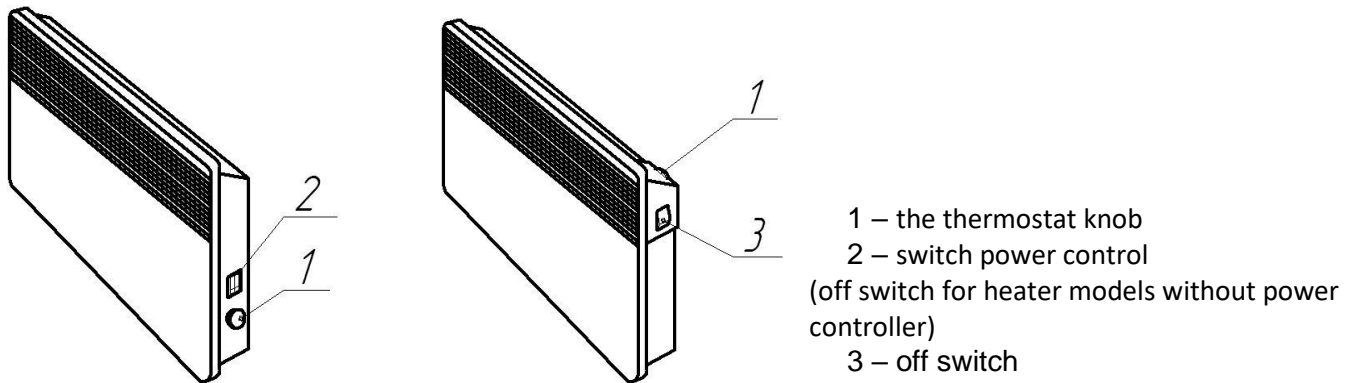


draught.4

**5.5** - Heating type IP24 can be installed in bathrooms, swimming pools (see Fig. 4). In this case, the installation of the heater of this type is not allowed: a zone (1) bathrooms, swimming pool, etc .; in the zone (2), where a person located in the bath, shower or swimming pool can reach a heater or its cord. Power outlets for heaters should be installed at least 25 cm above the floor and out of the zone (2).

**5.6** - Press the button on the position of incorporation, and then move the knob gradual power control from the off position "0". The thermostat knob sets the position "T" sign "T» knob should

be aligned with the markings on the housing of the heater or the control unit. The radiator is ready to operate - (circuit controls the heater is shown in Figures 5 and 6).



Draught 5: Operating controls location  
(IP 20)

Draught 6: Operating controls location  
(IP 24)

- 1 - the thermostat knob
- 2 - key power control  
(Off key for heater models without power controller)
- 3 - key off

## 6. MODE

Warning! It is forbidden to turn on and operate the radiator without attaching it to the wall or foundation on the floor. Start and run the heater can be only when the air intake grille is facing down.

### 6.1 - Connecting the radiator

Plug the power cord into an AC outlet heater. The thermostat is set at the position close to the "MAX". Turn on the heater by moving the key switch to «I» (key progressive regulator - positions "I" and "II").

When the room temperature reaches the desired value (you can check the temperature with a thermometer), slowly turn the thermostat to reduce the numerical values (looking at the selection), located on the knob, until the function heating is switched off, accompanied by the characteristic "click" . The selected temperature will automatically continue to persist in the room.

In order to reduce the room temperature, set the thermostat to meet lower numerical designation, in order to increase - higher.

To switch the heater mode saves half the power (for radiators with step power) simply set the control key to "0".

### 6.2 - Start function antifreeze.

The thermostat knob to position «T" and turn on the heater.

### 6.3 - Disconnect the heater from the mains.

Key regulator should be set (the key of regulated power) to "0", and then unplug the power cord from the outlet.

### 6.4 - Removing radiator

Before removing the heater must be disconnected from the network, according to information

at the point. 6.3 of this manual.

To remove the top of the heater and pull up on each other - until the output of the lower tap holes on the bottom of the handle of the discharge grille of the radiator and the heater is then pulled down

and we remove it from the upper hooks handles.

**6.5** - The following selected recommendations, useful for selecting models of radiators and their use.

The choice of rated power of heaters in the case where they are a major source of heat, should be carried out on the basis of the calculation, assuming 100 W per 1m<sup>2</sup> surface (for rooms with normal insulation of wall height of not more than 3 m).

In other cases, the choice of power heaters should be made by a qualified service technician in accordance with the actual heat loss of the room.

In order to reduce the energy costs must be:

- Trace in time to achieve the desired room temperature
- Switch off the heater on time airing room
- In the absence of the user in the room for at least two hours - not to change the thermostat setting, and in the case when you plan to output to more than 24 hours - must set the thermostat dial to the «T»;
- If the room has been installed a few heaters, synchronize their work by setting the thermostat knob to the same position.

## **7. MAINTENANCE**

You should at least once a month to clean the radiator grille of the dust with a brush and a vacuum cleaner, wipe the case with a damp cloth. Do not use abrasive or aggressive.

## **8. TRANSPORT AND STORAGE**

**8.1** - radiators in the manufacturer's packaging can be transported by all types of covered means of transport that will provide protection against rain and mechanical damage, according to the rules for their transport - defined by the selected carrier. During transport, the temperature should be in the range of - 50 ° C to 50 ° C at a relative humidity not exceeding 80%. Avoid impacts and uncontrolled movements inside the vehicle transporting the radiator.

**8.2** - heaters should be kept in the manufacturer's packaging in a dry room heated at a temperature from + 5 ° C to + 40 ° C at a relative humidity not exceeding 80%.

Heaters should not be stored in rooms with liquids and substances whose vapors can cause corrosion of components and damage to the wire insulation.

## **9. DISPOSAL**

The product does not contain materials requiring special disposal techniques.

Worn heaters must be dismantled and segregated to scrap non-ferrous metals and black, and then disposed of in accordance with the rules, regulations and methods adopted in the field of waste segregation.

The product does not contain precious metals.

## **10. WARRANTY**

**10.1** - The warranty period - 5 years from date of purchase on the heating element, 2 years for other elements.

**10.2** - The manufacturer guarantees that the product meets the safety requirements of the LVD (Low Voltage) Directive and EMC (electromagnetic compatibility)

EN 0335-1: 2012

EN 60335-2-30: 2009 + A11: 2012

EN 62233: 2008

EN 55014-1: 2006 + A1: 2009 + A2: 2011

EN 55014-2: 1997 + A1: 2001 + A2: 2008

EN 61000-3-2: 2006 + A1: 2009 + A2: 2008

during the lifetime (10 years) in strict compliance with the requirements of this manual.

During the warranty period, in the case of disclosure of significant defects that arose through the fault of the manufacturer, the consumer is entitled to a free repair, replacement or refund of its value in accordance with the requirements of the Law "On Protection of Consumer Rights".

Terms of warranty service:

The warranty covers manufacturing defects revealed during the warranty period.

The condition for the free warranty service is to follow the rules of the consumer installation and use, as listed in this manual.

Warranty repairs are made subject to the submission:

- Mechanically clean, undamaged packaged product
- Proof of purchase heater
- Properly filled warranty card.

The guarantee does not include the cleaning and the need for the implementation of prevention activities.

These works are carried out for an additional fee.

Guarantee does not include:

- Products which are damaged by external factors, such as voltage drop, lightning, fire, water damage, as well as neglect and other factors not under the control of the manufacturer
- Products which have ceased to operate due to improper connection to the network, and also because of the deviation of the electrical network parameters required standards (network failure)
- Products with traces of unjustified discovery, repaired or reconstructed
- In the case of use of the product for other purposes than expected producer
- Breach of the consumer requirements of this manual.

Repairs should be performed by authorized service centers.

Necessary information regarding the warranty period, use, use within the warranty period and post-warranty service can be obtained from the dealer.

**Products with this symbol can not be placed in containers with waste 'living. Under current law is not suitable for use of the device powered by electricity must be collected separately in specially designated areas, in order to process them and re-use based on existing environmental standards.**

