GB

USER'S MANUAL FOR A HEATING ELEMENT

with a temperature controller DROP **and** VOLCANO

We are grateful that you chose our product. We're confident that it will satisfy your needs. The heating element is dedicated to steel and aluminium radiators filled with water or a water mixture, e.g. glycol.

Selecting a heating element for a radiator

Radiator thermal power	Recommended heating element power
below 600W	300W
600W - 900W	600W
900W - 1200W	900W
1200W - 1500W	1200W
above 1500W	1500W

SAFETY RULES

1. The heating element should be installed by a qualified installer in accordance with all the binding safety regulations.

2. Connection to electricity must be carried out by a qualified electrician in conformity with applicable regulations.

3. The heating element must not be under voltage during installation, de-installation and maintenance. Avoid getting the housing wet.

4. The heating element must be submerged totally in water during operation. Do not activate the heating element when the radiator is empty.

5. If the heating element is activated in a radiator connected to central heating, if there are 2 valves on the radiator (cut-off and thermostatic – supply/return), one of the valves must be opened. It is caused by the temperature increase of water capacity.

6. The radiator with the installed electric heating element must not be mounted in the distance shorter than 60 cm from the edge of a bathtub, sink, washbasin or shower cabin.

7. The heating element may be connected permanently to the electric installation (without a plug), which is known as hard wire connection. Such an installation must include an appliance which disconnects a controller from the mains. Such an appliance must disconnect the mains on all the poles, with contact separation equalling at least 3 mm.

8. This device may be used by children over the age of 8 and people with limited physical, sensory or mental ability, as well as people without any experience with or knowledge of the device, provided that they are under the supervision of other people or they are instructed on the safe use of this device, and they are aware of hazards related thereto. Children should not play with this device.

9. Works connected with cleaning and maintenance must not be carried out by children, unless they are supervised.

GUARANTEE CONDITIONS:

A guarantee period is 24 months of a purchasing date. Product defects revealed within this period will be eliminated by the manufacturer free of charge or the product will be replaced with a new one with the same parameters.

A proof or purchase is a basis for a guarantee. A complaint will be considered within 14 days of a date on which a defective product was supplied to the manufacturer.

The guarantee excludes:

- using the product contrary to this user's manual (e.g. damage to a thermal fuse or burning a heating element, resulting from activating the heating element without water).
- any mechanical damage occurred during installation, de-installation or usage.
- effects of unauthorised interference with the heating element exceeding the normal installation activities.

Damaging a seal on the controller housing will result in the loss of the guarantee.

HEATING ELEMENT INSTALLATION AND USE

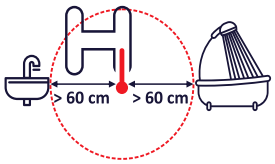
1 ALLOWED LOCATION OF THE HEATING ELEMENT INSTALLATION IN THE RADIATOR.

2 POSSIBLE INSTALLATION LOCATIONS

of the radiator with the heating element installed:

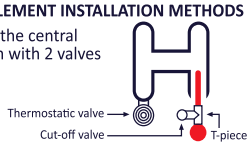
No possibility of installation in the distance shorter than 60 cm.

Forbidden installation over the bathtub/washbasin/sink/shower cabin.



3 HEATING ELEMENT INSTALLATION METHODS

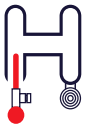
Connection in the central heating system with 2 valves and a T-piece



Central connection

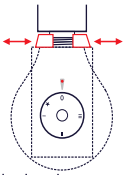
Connection with a single-pipe valve.

Connection through a disconnecting valve integrated with a T-piece



Connection in the electric radiator (not connected to central heating)

4 HEATING ELEMENT INSTALLATION IN THE RADIATOR.



Remove the 2-part flange protecting the head. Screw the heating element to the radiator by means of spanner No 22.

Do not screw the heating element in, when holding the controller housing (risk of damaging the housing).

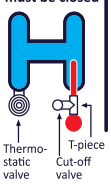
A special gasket used on the thread allows for screwing the heating element in "to the end", and then going back to the half-turn in order to arrange the controller head-on.

After screwing the heating element in, re-position the flange protecting the head.

5 FILL THE RADIATOR WITH WATER.

In the radiator connected to the central heating system, it is necessary to purge the heater. Remember! While the heating element is operating, one of the valves (e.g. the thermostatic valve) in the radiator must be opened (due to water thermal expansion). When the central heating system is on and both valves (thermostatic and cut-off) are opened, the heating element must be left in a stand-by mode (position 0) or disconnect it from electricity.
If, after the heating season, the central heating system is emptied, both valves on the radiator must be turned off (where the heating element is operating) so that water remains there. Remember to leave 4-5 cm of air (as with an electric radiator).

One valve must be closed



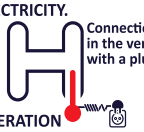
In the electric radiator (not connected to the central heating system), leave about 4-5 cm of air in the radiator due to water temperature expansion.

Remember to leave 4-5 cm of air (as with an electric radiator)

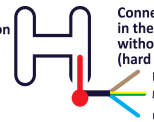
6 CONNECT THE HEATING ELEMENT TO ELECTRICITY.

Remember that an electric socket to which the heating element will be connected, must have a protective pin.

Connection in the version with a plug



Connection in the version without a plug (hard wire):



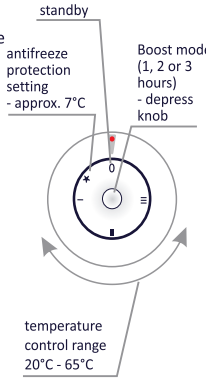
7 HEATING ELEMENT ACTIVATION AND OPERATION

The heating element has an infinitely variable water temperature adjustment function in the heater in the range 0-65oC and a Turbo mode (fast heating, drying) activated through pressing the knob (in any position).

When the heating element is connected to electricity for the first time, it performs a water presence test – a red light flickers fast. The test takes about 2 minutes, then the heating element switches to setting on the knob.

Infinitely variable temperature adjustment: The heating element is activated through turning the knob until the control lamp is lit. The operation of the heating element in this mode is signalled by a red light.

Symbols *, I, II and III on the knob correspond to water temperature at 7°C (anti-freezing point), 20°C, 40°C and 65°C, respectively. In position 0, the heating element is in a stand-by mode. In this position, a microprocessor will not allow water temperature in the radiator to fall below 5°C.



Turbo mode (maintaining water max. temperature 65°C for 1, 2 or 3 hours): in order to activate this mode, press the knob (in any position).

Single pressing activates Turbo for 1 hour, re-pressing – for 2 hours, another re-pressing – for 3 hours. The fourth pressing down deactivates the Mode.

The activated Turbo mode is signalled by a flickering light:

1 x per 2 seconds – Turbo activated for 1 hour,

2 x per 2 seconds – Turbo activated for 2 hours,

3 x per 2 seconds – Turbo activated for 3 hours

After completing the Turbo mode, the heating element goes back to the temperature pre-set on the knob.

8 POSSIBLE ERRORS (SIGNALLED WITH A BLUE LIGHT):

- Blue constant light – lack of water in the heater or insufficient amount of water – disconnect the heating element from the socket, fill in the water level and re-connect the heating element.
- A blue light flickers 1 x second – a damaged heating element or a temperature sensor – contact the seller or the manufacturer.

Do not open the heating element housing. There are no repairable parts inside. Return the product to the manufacturer to carry out the repair.

The power supply cable is not replaceable. This is type Y. If it gets damaged, it may be repaired by the manufacturer only.

Before cleaning the housing, disconnect the heating element from the electric socket. The housing may be cleaned with a moistened cloth, or with addition of delicate cleaning agents. Protect the heating element housing against flooding.

HOTTECH

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