

LST Element

User Guide



ATTENTION: Fitting and connection of the heating element should only be performed by a qualified installer.

READ THIS GUIDE BEFORE STARTING INSTALLATION

Intended Use of Device

The heating element is an electric device intended solely for installation in radiators (standalone or connected to the central heating system) to serve as space heaters, or clothes and towels dryer.

Technical Information

Heat outputs: 100, 200, 300, 400, 600 Watts

Power supply: 230 V / 50 Hz

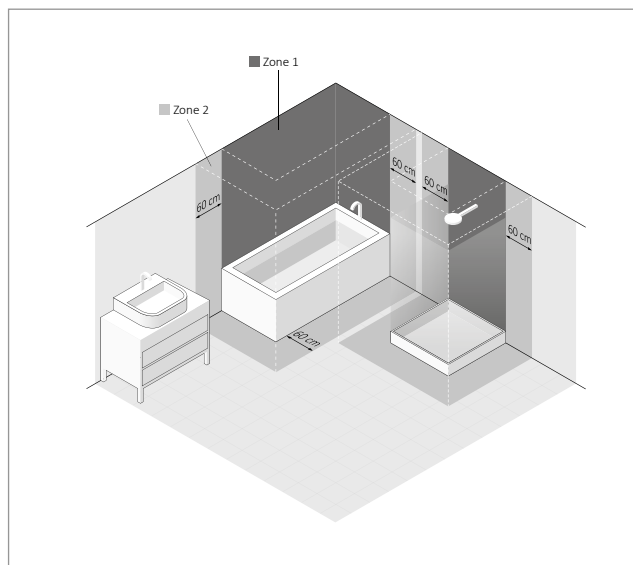
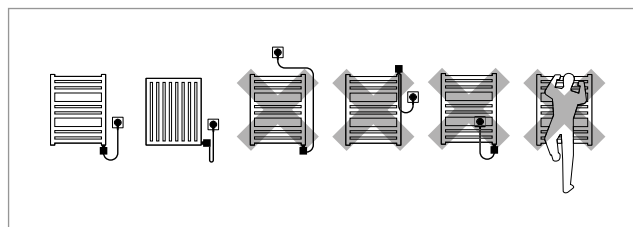
Insulation class: Class I

Towel rail connection thread: G 1/2"

Casing protection class (IP): IPx5

Safety Requirements - Installation

- Connect the unit to a sound electrical installation (see the ratings on the heater).
- Switching on the heating element in the open air to test the device is permitted for a maximum of 3 seconds.
- Never test a heating element that is already installed.
Do not turn the heating element on in an empty radiator.
- Ensure that the power cord does not touch the hot parts of the heating element or radiator.
- Before installing or removing the device, make sure it is disconnected from the power source.
- Do not open the device — any interference with internal components will invalidate the warranty.
- Heating element's electric output cannot exceed 60% heating output of the radiator for the following parameters: 75/65/20°C.
- The device is intended for home use only.
- Fitting and Installation of the device must be carried out in accordance with all local regulations for electrical safety, including installation within permissible locations only. Observe bathroom electrical zone regulations shown on the right.
- Follow the subsequent guidelines when connecting the electrical installation:
 - Brown wire — live connection to the circuit (L)
 - Blue wire — connect to neutral (N)
 - Yellow & green wire — earth connection (PE)



LST Element

User Guide



Basic Operation

Pressing the  switches the heating element on and the radiator will warm up to an average temperature of approximately 43°C. On the control panel blue LED lights up to indicate the current (ON) status of the heater.

NOTE: Surface temperature of the radiator will not be constant and may vary in places.

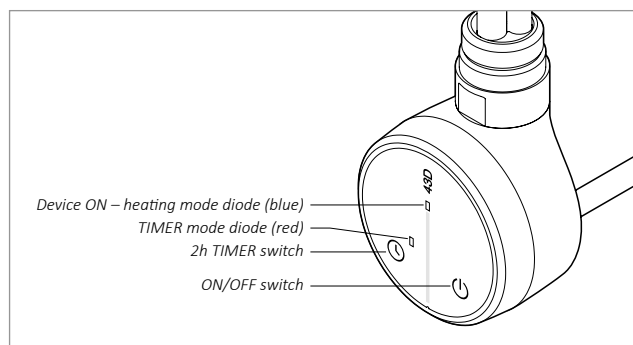
This is a normal phenomenon and it is due to the design of the heating element, the physical properties of the heat transfer medium in the radiator as well as other physical phenomena (convection and diffusion).

Timer Function

Pressing the  key activates the 2 hour timer. The Timer function automatically turns the heater off after 2 hours. Active timer mode is indicated by a red LED located near the key.

Pressing the  key again during 2hr timer mode operation disables the TIMER and reverts heating element.

NOTE: Pressing the  key during the timer mode deactivates the timer and switches heating element off.



Antifreeze Function

As long as the heating element is connected to the mains power supply, the heating element temperature sensor continues to control the heating medium temperature. The Antifreeze function remains active even when the heater is turned off. As soon as the temperature around the sensor falls below 6°C, the heating element will switch on automatically preventing the heating medium inside the radiator from freezing. Activation of the Antifreeze function is indicated by slow blue LED flashes (every 3 seconds).

Fault Indication

The heating element has a built-in protection against a risk of overheating while running in a dry radiator. This does not eliminate a possibility of temperature sensor failure. The controller will display a temperature alert by means of a flashing blue LED (every 1 seconds). The alert does not mean the unit is damaged, it informs the user that the set operating temperature has been exceeded for unknown reasons.

Troubleshooting

Problem	Possible cause	Solving the problem
The heater is connected to the mains power, no LED is on	Connection problem	Check the mains power cable connection to the spur.
Rapid flashing of blue LED (every 1 second)	Overheating temperature exceeded	Disconnect heating element from the mains power supply and wait until the radiator has cool down. Connect it again and turn the heating element on. If the problem persists, contact MHS Radiators.
The radiator heats up to very high temperatures.	Heating element power output and radiator power output mismatch. Possibility of electronics fault.	Verify the correct heating element power output is used. If not, disconnect heater from mains and contact MHS Radiators.