# Termik - X

Additional equipment (row of several fans), attached "to the lower edge of the central heating radiator causes a forced flow of heat around the heating plates, thereby increasing the rate of air heating in the room several times (up to 5 times) and increasing the efficiency of the radiator up to 3.8 times.

### Attention: before first use, cover the radiator at the top with 4 folded gauze."Dirt stored in the radiator is caught in the gauze.



Technical data and calculations:

#### 1 Termik is most effective up to 40 m3

Supply voltage	DC 12V (Max.15V DC). DC 5.5 x 2.1 mm
Supply current	According to number of fans used
	4 Fans = about 360 mA, Electronics = 6 mA
Temperature sensor	NTC power cord about 700 mm
Dimensions	Length = 590 width = 86 height = 30 mm
Flow	1 fan about 40 m3 / h at full speed
Consumption	4 fans = approx 4W (1 kWh for 250 hours.)
<b>Consumption season</b>	Heating season about 220 days
	(daily average of 12 hours) = 2640 hours
	4 fans = 4W x 2640 hours = 10.56 kWh
Speed control	Manual knob. 50 - 100%

Spee

A very simple assembly can be done even by a complete layman. The device is attached to the radiator with only two screws. Specially developed electronics automatically turn on the fans when the radiator is warm" and switches off when cold (switching at approx. 30°C) and enables manual fan speed control. The highest efficiency is found in sheet metal radiators and electric direct heaters.

## How is it possible that Termík saves heating costs?

#### The principle of heating consists in the conversion of primary energy into thermal energy. "We have to transfer this energy into the heated space.

In the case of water heating, hot water is supplied to the radiators through pipes. The heat from the radiators is transferred to the room by the air flow around the surface of the radiator. This process is very slow with conventional radiators. With this principle, the outgoing water is cooled by approx.  $3^{\circ}C = \text{very low use of heating energy}$ . The spontaneous air flow is affected by the temperature of the radiator. The higher the radiator temperature, the higher the air flow rate. At 90°C it is approx. 46 m<sup>3</sup>/hr., but at 50°C it is only approx. 24 m<sup>3</sup>/hr. If we add Termík under the radiator, the flow rate will increase by 150 m<sup>3</sup>/hour. Therefore, the radiator transmits up to five times more thermal energy into the room in the same time. This means that up to 16°C more energy from the heating water is transferred into the room. The temperature thus rises several times faster and the heating time is reduced by up to a fifth. It depends on the type of radiator. The highest efficiency is achieved with so-called sheet metal radiators. When using an additional thermostat in series with a room thermostat, the burning time of the boiler can be reduced up to 8 times, depending on the type of radiator.

### Using Termik, it is possible to reduce the temperature of the heating water from the boiler by up to 30°C.

# Expanded fan holder with fan block

