## Termik - X

An addition to radiators (4 to 8 small and very quiet fans) attached from the bottom to the edge, the air is forced to run along the plates of the radiator.

The efficiency will increase up to 3.8 times.

The heating of the rooms is cca 5 times faster.

# Caution! Before you start cover the radiator on the top with wet gause to trap the dust from the plates

#### 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 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.)

Consumption season Heating season about 220 days

(daily average of 12 hours) = 2640 hours 4 fans =  $4W \times 2640$  hours = 10.56 kWh

Speed control Manual knob. 50 - 100%

Very easy installation can withstand a complete layman. The device is attached to the radiator by only two screws. The specially developed electronics automatically turns on/off the fans-switching at 30 ° C

#### How is it possible that Termik can save on heating costs?

The principle of heating is the conversion of primary energy (gas and electricity) into thermal energy. This energy we must transfer into a heated room.

In the case of the water heating is hot water supplied to the radiator through pipe.

From the radiator by air flow around the desks comes the warmth into a room.

This process is by conventional radiators very slow.

With this principle, is the outgoing water cooled down cca 4°C =very low utilization of heating energy. Spontaneous air flow is influenced by the temperature of the radiator. The higher the temperature of the radiator, the higher the rate of air flow.

At 90°C it is approximately 46 m3/hr., but at 50°C, it is only about 22 m3/hr.

If we add the Termik beneath the radiator and increases the flow rate to 150 m3/h.

The radiator cools rapidly down and outlet water temperature is up to 20°C lower.

This means, that into the room moves 16°C more energy from the heating water.

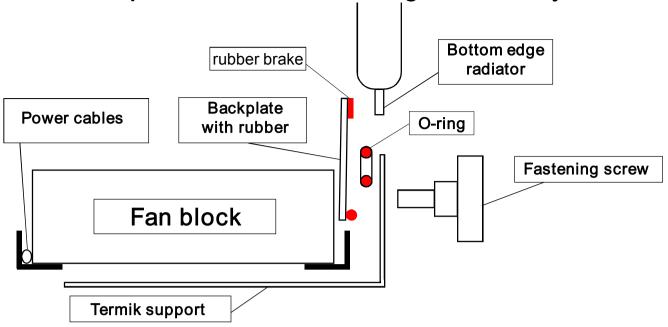
The temperature rises much faster and the heating time of the room is shortened up to five times.

This depends on the type of radiator. Highest efficiency is achieved by the so-called tinny radiators.

Using Termik we can reduce the system temperature up to 30°C.

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### Exploded Termik drawing - assembly.



#### Termik mounted on the underside of the radiator

