

The revolution of pest control started with hot air. Discover the next generation: Thermo-bug® 2.0





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Dear Colleagues,

We pest controllers are expected to provide **discrete, quick** and **quiet** removal of vermin of all kinds.

It should be odourless and without using any chemical substances. Sustainable, effective and 100% deadly.

In 2005, we have achieved a small revolution with the mobile **Thermo-bug**®. Denaturation by thermal disinfestation is the magical word. In closed rooms, ambience temperatures up to 70 °C destroy every protein connection and kill irrevocably.

It's nothing but hot air? No, it's much more than that! The **Thermo-bug**® method has become a standard tool of smart pest controllers.

The next generation has been in use since January 2018. The **Thermo-bug® 2.0**: Even more compact, lightweight and stable than its predecessor. The digital control options via the **Thermo-bug® app** and other features make it even easier and more flexible in use. See for yourself. You will love it – and your customers will love you...

With best regards,

Thilo Fleschhut



The bed bug. Latin: Cimex lectularius

This bloodsucking ectoparasite attacks mammals, birds, and humans. Fully grown bedbugs have a length, when ungorged, of 4-7 mm and a yellow to reddish brown appearance. When gorged, they reach 9 mm in length; in such cases the abdomen becomes increasingly black.

While the bedbug hides during the day, at night it goes out in search of a host to fund nourishment. At 18 - 22°C room temperature, the fully grown animal sucks every 3 - 7 days for 3 to 20 minutes each time.

At ideal temperatures and with sufficient nourishment, a bedbug has a lifespan of up to 18 months. A female lays up to 400 eggs at an average rate of 3 per day.

Hoteliers and private households are sounding the alarm!

Until only a few years ago, these insects were considered extinct, now they are here again: the bedbugs.

Exterminators blame resistance to insecticides, increased global travel activity, and an increased sensitivity in society to the use of pesticides and insecticides.

Once you have the little parasites in your house, it is not so easy to get rid of them again.

An unbearable itching, generally several bites in a row (the bedbug "street"), small spots of blood on the sheets, and a sweet-seeming smell in the room – these are sure signs of a bedbug infestation.





The **Thermo-bug**® principle: Denaturation through thermal disinfestation.

The strategy is: heat.

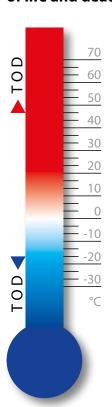
Biochemists call it denaturation. The term describes a structural change of bio molecules such as proteins that is connected to a loss of biological function of these molecules. Every cell is made of proteins.

If the ambience temperature is heated to 45 - 55 °C for an extended period (at least 1 hour), every protein compound will irrevocably clot and any life will die.





The ambience temperature is a matter of life and death.



Ambience temperatures above 45 °C and below -18 °C destroy unprotected life forms very quickly. The **Thermo-bug**® heats up a room easily up to 70 °C.

Quickly, silently and without any chemicals, it is 100% fatal.

For even, thorough room-air heating, we recommend use of **Thermo-bug® 2.0** connect, combined with the **Thermo-bug® 2.0 trailer**. The **Thermo-bug® airblower** in high rooms.

An investment that pays off.

Thermo-bug® 2.0 are high-temperature fan heaters for use in closed rooms

The current product range:

- Thermo-bug® 2.0 connect
- Thermo-bug® 2.0 trailer
- Thermo-bug® 2.0 app
- Thermo-bug® 2.0 basic
- **■** Thermo-bug® airblower

The first device for thermal disinfestation that can be comfortably operated from home.

Thermo-bug® 2.0

Technical data

Voltage:	3 x 400 V
Power:	4,5 / 9 KW
Max. mains current:	16 A
Housing protection type:	IP54
High-performance fan:	Ø 300 mm, 1800 m³/h
Noise level:	53 dB
4 temperature sensors:	0° C - 70 °C
Safety thermostat (ST) Limiter with automatic	
reset function	80 °C
Weight:	17 kg
Sizes:	Length: 593 mm Width: 340 mm Height: 510 mm

Thermo-bug® 2.0 connect

Thermo-bug® 2.0 connect

High-performance heating fan with a heating output up to 70 °C. For use in closed rooms.

Scope of delivery

The **Thermo-bug® 2.0 connect** is delivered fully functionally with 4 temperature sensors and operating instructions.



The new generation is even more compact, lighter in weight and height in performance: The Thermo-bug® 2.0

- To avoid thermal overheating, the connection housing and all its operating elements were placed below the radiator.
- Higher stability through double-walled load-bearing parts.
- Perforated contact protection against the heating tube.
- Temperature-measurement in the room with connectable, flexible temperature
- 4 composite ceramic feet ensure a safe and temperature-resilient stance.
- Comfortable plastic carry handle reinforced with integrated metal band.



- Use the new Thermo-bug® app to control and monitor your new Thermo-bug® 2.0 connect no matter where you are. You can use your Smartphone, tablet, laptop or computer. Thermo-bug® app → Page 12
- The entire temperature curve will be recorded and can be saved and printed out as proof of application.
- he scope of delivery includes 4 pluggable temperature sensors (cable length approx. 4 m). Every sensor can be controlled and read individually. The average of all 4 sensors will be considered to control the heating temperature.
- 230 V socket for the **Thermo-bug**® airblower with 4A fuse

- Timer function for adjustable operating duration
- Overheating protection with automatic reset
- Very quiet operation, only 53 dB
- Air change 1800 m³/h
- Housing protection type IP54
- Easy handling thanks to low dead weight (17 kg)
- CE-marking and tested to the EMC directives

Properly heating up large rooms? Best use a second additional heat source: The Thermo-bug® 2.0 trailer

Technical data

Voltage:	3 x 400 V
Power:	4,5 KW
Max. mains current:	16 A
Housing protection type:	IP54
High-performance fan:	Ø 300 mm, 1800 m³/h
Noise level:	53 dB
2 temperature sensors:	0 °C - 70 °C
Safety thermostat (ST) Limiter with automatic reset	
function:	80 °C
Weight:	13 kg
Sizes:	Length: 593 mm Width: 340 mm Height: 510 mm

Thermo-bug® 2.0 trailer

Thermo-bug® 2.0 trailer

A fully compatible second heat source for large rooms and/or to increase the air change.

The **Thermo-bug® 2.0 trailer** is connected to the **Thermo-bug® 2.0 connect** directly with a sub-D cable. The **Thermo-bug® 2.0 trailer** is controlled via the **Thermo-bug® 2.0 connect**.

Attention: Can only be used in connection with the **Thermo-bug® 2.0 connect**.



The new generation is even more compact, lighter in weight and height in performance: The Thermo-bug® 2.0

- To avoid thermal overheating, the connection housing and all its operating elements were placed below the radiator.
- Higher stability through double-walled load-bearing parts.
- Perforated contact protection against the heating tube.
- Temperature-measurement in the room with connectable, flexible temperature sensors.
- 4 composite ceramic feet ensure a safe and temperature-resilient stance.
- Comfortable plastic carry handle reinforced with integrated metal band.



- Control through the Thermo-bug® 2.0 connect directly or via the new Thermo-bug® app. You can control and monitor the Thermo-bug® 2.0 trailer with it as well, no matter where you are. You can use your Smartphone, tablet, laptop or computer.
- Connecting the two
 Thermo-bug®-devices connect and trailer
 with a SUB-cable automatically adjusts the
 power of the two units to 4.5 KW each.
- The temperature sensors 3 and 4 of the Thermo-bug® 2.0 connect are inserted into the sockets of the Thermo-bug® 2.0 trailer.
- 230 V socket for the **Thermo-bug**® airblower with 4A fuse

- Overheating protection with automatic reset
- Very quiet operation, only 53 dB
- Air change 1800 m³/h
- Housing protection type IP54
- Easy handling thanks to low dead weight (13 kg)
- CE-marking and tested to the EMC directives

For best control. The Thermo-bug® 2.0 app Always and everywhere.

Thermo-bug® 2.0 app

The app can adjust and control the following functions:

Control functions

- Start/Stopp
- 60 °C / 70 °C
- Temperature + / -
- **■** Timer

Function check

- Sensor 1 4
- Temperature average
- Temperature target

Fault control

- Sensors
- Fan
- Phase test (connection)
- Thermal switch
- Trailer connected





The practical thermal disinfester for analogue single operation.

Thermo-bug® 2.0 basic

Technical data

Voltage: 3 x 400 V

Power: 4,5 / 9 KW

Max. mains current: 16 A

Housing protection type: IP54

High-performance fan: Ø 300 mm,
1800 m³/h

Noise level: 53 dB

1 temperature sensor: 0 °C - 70 °C

Safety thermostat (ST) Limiter with automatic reset

Sizes:

function: 80 °C Weight: 15 kg

Length: 593 mm Width: 340 mm Height: 510 mm

Thermo-bug® 2.0 basic

Thermo-bug® 2.0 basic

Basic unit for disinfestation up to 70 °C.

Scope of delivery

The **Thermo-bug® basic** is delivered completely functional, incl. the operating instructions.



The new generation is even more compact, lighter in weight and higher in performance: Thermo-bug® 2.0

- To avoid thermal overheating, the connection housing and all its operating elements were placed below the radiator.
- Higher stability through double-walled load-bearing parts.
- Perforated contact protection against the heating tube.
- Temperature-measurement in the room with connectable, flexible temperature sensors
- 4 composite ceramic feet ensure a safe and temperature-resilient stance.
- Comfortable plastic carry handle reinforced with integrated metal band.



- Main switch for on/off
- Power switch for 4.5 KW (half power)
- Power switch for 9 KW (full power)
- Pluggable external temperature sensor with 4 m cable
- Temperature display with adjustable temperature
- 230 V socket for the **Thermo-bug®** airblower with 4A fuse
- High-performance fan for high temperatures

- Overheating protection with automatic reset
- Very quiet operation, only 53 dB
- Air change 1800 m³/h
- Housing protection type IP54
- Easy handling thanks to low dead weight (15 kg)
- CE-marking and tested to the EMC directives

The Thermo-bug® airblower will bring hot air back to the ground instead of leaving it by the ceiling.

Thermo-bug® airblower

Technical data

Voltage: 230 V
Power: 72 W
Current: 16 A

Ambience temperature: 0 °C - 70 °C

Noise level: 51 dB

Air volume: 700 m³/h

Weight of Airblower: 9,15 kg

Weight stand: 2 kg

Sizes of Airblower: Width: 40 cm

Depth: 63 cm Height: 40 cm

Sizes of stand Width: 12 cm (packed size): Depth: 120 cm

Height: 12 cm

Suction tube: Ø 20 cm,

Temperature resilient

Thermo-bug® airblower with stand

To circulate hot air in rooms.

With the integrated spiral tube and the stand, hot air can be extracted right below the ceiling and distributed near the floor.

Scope of delivery

with stand

The **Thermo-bug® airblower** is delivered with suction tube and stand.



Product properties / Equipment features

- Can be used at ambience temperatures of 0 °C 70 °C
- Very quiet operation, only 51 dB
- Air change 700 m³/h
- Housing protection type IP44
- Suction hose/spiral tube 20 cm, temperature-resilient and extensible from the housing, height flexibly adjustable, max. height approx. 2.50 m
- Easy handling thanks to low dead weight (9.15 kg)
- Stainless steel EN 1.4016 housing with integrated thermostat and power switch (surge-water-tight)









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