

HEATING CHAMBER HB (HEATING BOX)

EFFICIENT AND PRECISE HEATING UP TO 120 °C

Thanks to optimised air circulation, the HB heating chamber provides rapid heat-up times and high energy efficiency up to 120 °C. Accommodating up to two IBCs or eight drums, and the ability to be driven under by a pallet truck or a forklift, it offers flexible use. The modern PLC control system ensures precise process regulation, while the spill tray ensures safety and environmental protection.



Fast heating

High airflow accelerates the heating process in the heating chamber



Energy efficiency

Reduced energy consumption thanks to minimised losses and lower peak loads (7 kW)



Optimal insulation

The labyrinthine structure of the panels leads to a significant reduction in heat loss



Functional safety

Reliable performance and operational safety in accordance with Machinery Directive 2006/42/EC



Even heat distribution

Even and targeted airflow to containers

FAST HEATING IN TWO SIZES



HB 1300 heat chamber for 1 IBC or up to 4 drums



HB 2700 heat chamber for up to 2 IBCs or 8 drums

MODEL	HB 1300	HB 2700
Installation location	Indoors	
Colour (RAL code)	Traffic Grey (RAL 7043)	
Secondary colour (RAL code)	Grey White (RAL 9002)	
Tertiary colour (RAL code)	Traffic Red (RAL 3020)	
Material	Steel	
Surface	Painted	
Door design	Single-leaf	Double-leaf
Containment volume [l]	1000	
Certification / certificate	DIBt (applied for)	
Capacity IBC / CP / EP / drum	1 / 1 / 1 / 4	2 / 2 / 3 / 8
Bay dimensions W x D x H [mm]	1390 x 1235 x 1350	2790 x 1435 x 1350
External dimensions	2740 x 2050 x 2575	4155 x 2050 x 2575
Load capacity [kg/m ²]	1250	
Ground clearance height [mm]	100	
Insulation material thickness [mm]	100	
Thermal transmittance of panels [W/(m ² K)]	0.37	
Backup fuse max. [A]	16	
Connection voltage	3/N/PE 400 V, 50 Hz	
Heat output [W]	6000	
Weight [kg]	1185	1555

Note: subject to technical modifications.

AIR FLOW AND INSULATION

OPTIMUM AIR CIRCULATION FOR MAXIMUM EFFICIENCY

The air flow in the heating chamber has been perfected using state-of-the-art CFD simulation - for even and efficient heating of your containers.

- **Efficient recirculating airflow:** a high-performance axial fan rated at 0.55 kW ensures an air flow of 2900 m³/h with significantly lower energy consumption and reduced waste heat compared to a centrifugal fan. This reduces operating costs and optimises temperature stability in the heat chamber.
- **Precisely controlled air flow:** the heated air is distributed evenly across the entire width of the chamber and guided through a slotted plate from above and behind. The air flow generated flows around the containers in an ideal manner and ensures complete air circulation resulting in maximum efficiency and constant temperatures.
- **Effective heat transfer:** instead of just touching the containers, the hot air hits them head-on at high speed - for faster and more even heating.

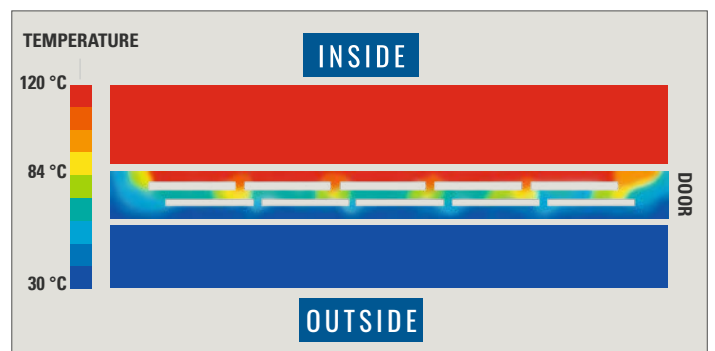


PERFECT INSULATION - MINIMISATION OF HEAT LOSSES

Our HB heating chamber utilises highly advanced door insulation that effectively eliminates thermal bridging and keeps the heat where it is needed.

- **Maximum energy efficiency thanks to intelligent design:** thanks to a special door design with centrally offset slotted holes, heat transfer is reduced in a targeted manner. The extended thermal path acts like a labyrinthine insulation mechanism that drastically reduces thermal conductivity.
- **Scientifically optimised by means of heat distribution simulation:** the simulation of the temperature curves shows in impressive fashion that the heat decreases sharply from the inside to the outside - for significantly improved insulation and minimal energy losses.
- **Advanced material structure for optimum insulation:** the special design minimises the size of the sheet metal openings and thus ensures efficient thermal insulation in the door area.

This innovative solution keeps the heat in the chamber - for maximum energy savings and maximum efficiency in your business!



EQUIPMENT

PREMIUM CONTROLLER

- **Maximum precision and safety:** the modern control and regulation technology ensures precise temperature control, high ease of use and maximum safety - perfect for industrial applications with the highest requirements.
- **Precise temperature control:** with the intelligent PLC control system based on ELIWELL, the temperature remains constant to +/- 0.5 K at the sensor. The adjustable range of +15 °C above ambient temperature up to 120 °C guarantees optimal conditions for your processes.
- **Intuitive touchscreen operation:** the central 7" touch display allows you to control all functions intuitively and monitor temperature curves and system messages in real time.
- **Automatic switch-off:** the fan and heater switch off automatically when the heating chamber door is opened - for optimum personal protection and energy-efficient operation.
- **Extensive connectivity & monitoring:** with MODBUS interface, USB data output and analogue value transmission (4-20 mA), you are always optimally networked. All relevant data is available to you for complete documentation.
- **Robust design - safe and durable:** the switch cabinet is designed for temperatures up to 40 °C and reliably protects the control unit against external influences.



SIGNAL LIGHTS

Clear signals for safety and monitoring in operation

Our heating chamber is equipped with an intelligent LED signalling system that provides clear status information at all times. Thanks to the clearly visible positioning in the roof area, you can keep an eye on the operating status at all times.

Two-colour LED signal lights (IP 65) for immediate status display:

- **Green** - signals regular operation - everything is running according to plan.
- **Red** - reliably warns of faults. In addition, an acoustic signal sounds for an immediate reaction.



SAFETY TEMPERATURE LIMITER

Reliable overheating protection

With the integrated safety temperature limiter (STL), our heating chamber offers reliable protection against overheating.

- **Automatic safety shutdown:** the STL continuously monitors the heating process and interrupts the power supply permanently as soon as the preset limit value is exceeded.
- **Reliable protection for your products:** precise temperature monitoring reliably protects your products against critical overtemperatures.
- **Manual reset for full control:** following a safety shutdown, a deliberate manual reset is required - for maximum safety and control.

