

TruHeat HF  
Series 1000 / 3000 / 5000

When it comes  
to process heat,  
don't compromise.





## Automatic power compensation and you're still in full control. TruHeat HF Series 1000 / 3000 / 5000.

TruHeat HF Series 1000 / 3000 / 5000 is a family of HF generators for induction heating processes. Its compact size and high power density, combined with a broad frequency range, makes it unique in the industry. The field of application is as broad as the world of induction heating. Whether it's for thermal treatment of micro devices or for highly automated heating processes, TruHeat HF Series 1000 / 3000 / 5000 masters any challenge.

With TruHeat HF Series 1000 / 3000 / 5000 many traditional soldering processes can now be easily automated. For the manufacture of laminated tubes and films, these HF generators are the ideal solution for induction seam welding. In filling applications, it can be a crucial element for sealing containers with large diameters or irregular shapes. Of course, TruHeat HF Series 1000 / 3000 / 5000 can deliver the required energy for just about every other heating process including contractin, hardening, melting and evaporating.

With its high efficiency HF design, TruHeat HF Series 1000 / 3000 / 5000 is a very cost effective heating solution. Short heating times and precise energy delivery are just two of the many benefits that allow this generator to become your partner in productivity. A variety of interfaces for easy system integration is available. These include analog / digital, RS 232, PROFIBUS and CAN Bus.

The TruHeat HF Series 1000 / 3000 / 5000 product family consists of HF generators with 5 kilowatts (kW) and 10 kW of output power. Less than half the size of traditional generators, the compact modules TruHeat HF Series 1000 is a perfect fit for quick and easy integration into critical induction heating applications. The 19-inch rack mount TruHeat HF Series 3000 and the tabletop version TruHeat HF Series 5000 also permit their integration into a wide range of system configurations.

### Features

- Extremely compact design
- Wide load adaptation range
- Wide frequency range
- Very high reproducibility for processes
- Multiple communication interfaces

### Benefits

- Allows easy system integration
- Maximum output power during the whole process
- Enables optimal operating frequency for the respective process
- Consistent process results
- Remote control from higher-level management systems



TruHeat HF Series 1000



TruHeat HF Series 5000

Output Parameters	
Output Power	5 kW, 10 kW
Output Frequency	50 kHz – 450 kHz 50 kHz – 800 kHz (5 kW)
Winding Ratio of the Output Transformer	6:1 – 16:1
Max. Output Voltage	1 500 V
Max. Output Current (active current)	105 A – 560 A <sup>1</sup>

1) Depending on transmission ratio and output power.

Input Parameters	
Mains Power Consumption	6.5 kVA – 12.5 kVA
Mains Voltage	3 x 200 V / 208 V, ± 10 % (5 kW) 3 x 400 V, ± 10 % (5 kW – 10 kW)
Mains Frequency	50 Hz / 60 Hz
Power Factor	0.95
Efficiency	90 %

Cooling Specifications (Water-cooled)	
Max. Water Pressure	6 bar
Min. Differential Pressure	2 bar
Water Flow Rate	
Power Supply Unit	4.2 l/min at 2 bar
External Circuit	3.6 l/min at 2 bar
Max. Cooling Water Temperature	35 °C

Environmental Specifications	
Ambient Temperature	+10 °C to +45 °C operating –20 °C to +55 °C storage –20 °C to +70 °C transportation
Rel. Air Humidity <sup>2</sup>	10 % – 90 % operating 30 % – 95 % storage 95 % transportation
Air Pressure	800 hPa – 1 013 hPa <sup>3</sup>

2) Below dew point under all conditions.

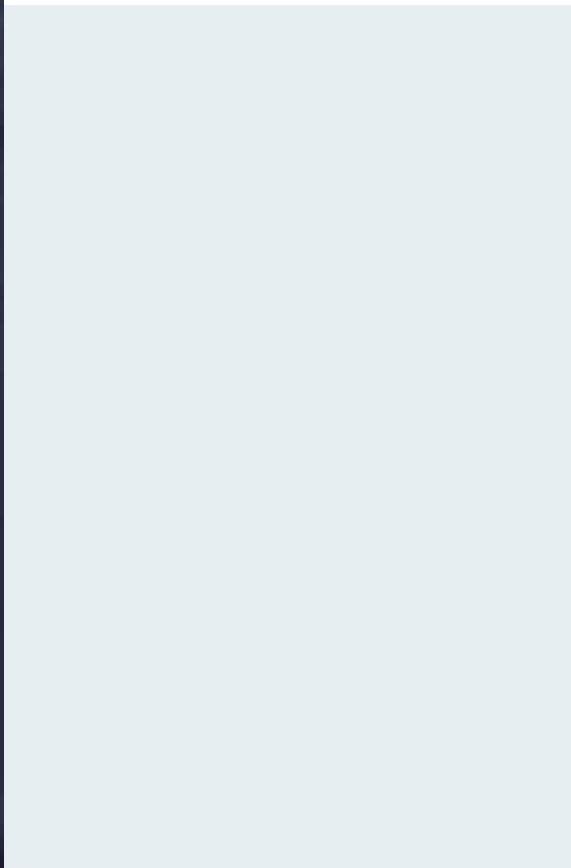
3) Max. operating altitude: 2000 m above sea level.

Interfaces	
A/D Interface	37-pin Sub-D
RS 232	9-pin Sub-D
PROFIBUS	9-pin Sub-D
CAN Bus	5-pin Mini-Style Connector

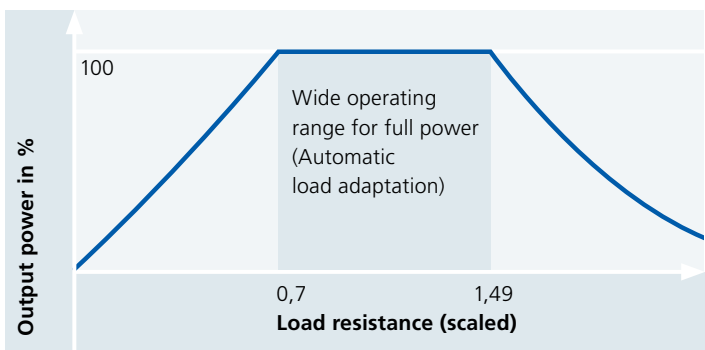
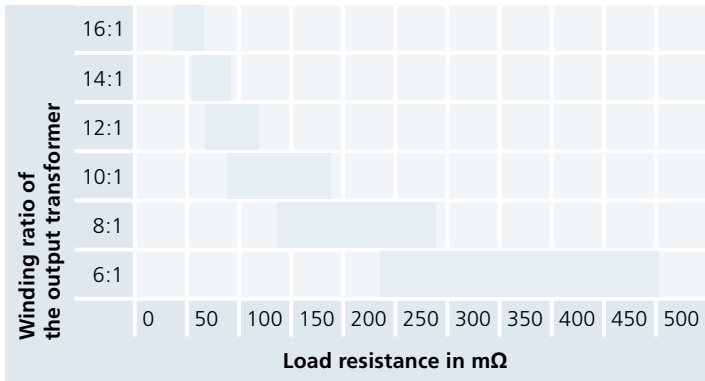
Dimensions (W x H x D), without Connectors	
TruHeat HF Series 1000	211 mm x 122 mm x 500 mm
TruHeat HF Series 3000	483 mm x 133 mm x 662 mm
TruHeat HF Series 5000	555 mm x 195 mm x 700 mm
External Circuit	114 mm x 181 mm x 355 mm
Weight	
TruHeat HF Series 1000	16 kg
TruHeat HF Series 3000	29 kg
TruHeat HF Series 5000	40 kg
External Circuit	12 kg

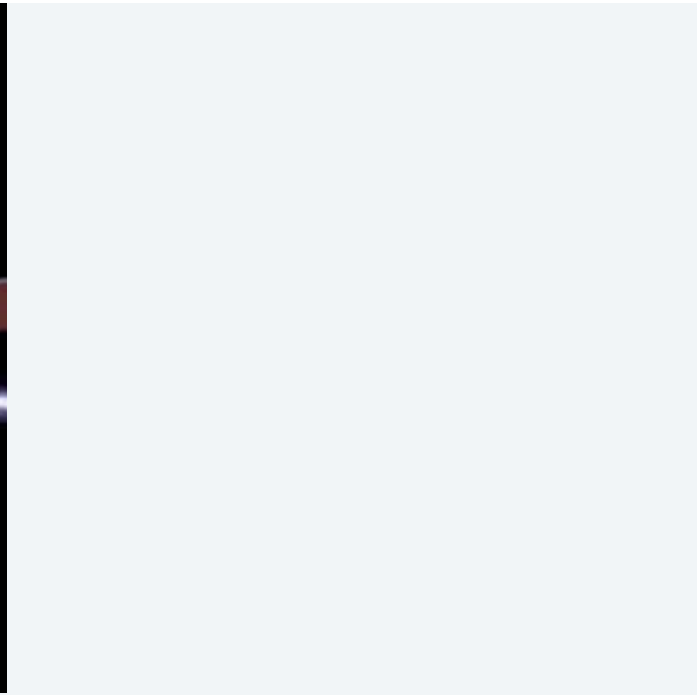
Protection Class	
TruHeat HF Series 1000	IP 30
TruHeat HF Series 3000	IP 54
TruHeat HF Series 5000	IP 54
External Circuit	IP 54

System Components	Inductor Recooling System Optical Pyrometer External Programmable Controller Control and Matching Software
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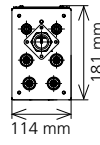
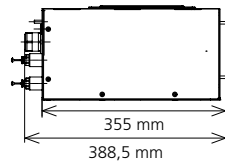


Load adaptation for maximum output power

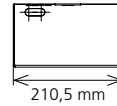
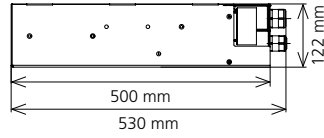




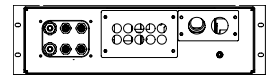
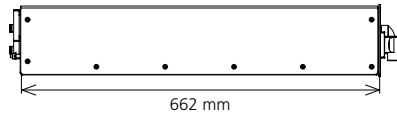
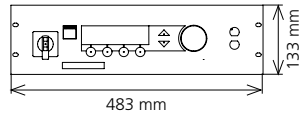
## External Circuit



## TruHeat HF Series 1000



## TruHeat HF Series 3000



## TruHeat HF Series 5000

