Sinac® 100 PM/PH

The Sinac 100 PM/PH is a parallel-compensated power source for medium- and high-frequency induction heating applications. Sinac systems are installed worldwide, offering proven reliability and operational flexibility in a wide range of industries.

Sinac increases throughput
Fast, accurate, localized and reproducible heating patterns help ensure high productivity.

Sinac improves quality
Sinac's microcontroller ensures precise repeatability of heating cycles.

Sinac is kind to the environment
No flames, no gas and virtually no radiant heat mean a more comfortable, more productive working environment. That's good news for the natural environment too.

Sinac lets you do more
Sinac's application versatility—together with its ability to support a wide range of coil designs—mean you can perform practically any heating task.

Sinac reduces costs
Precise and controllable heating minimizes scrap, re-working and energy costs.

EFD® INDUCTION

A product within the Sinac family

Sinac®100 PM/PH

PRODUCT FEATURES

Stationary systems
Sinac 100 PM/PH belongs to EFD Induction's Sinac range of stationary induction heating systems. The Sinac 100 PM/PH delivers a constant power factor of 0.95 at all power levels and an efficiency factor of 92-93% from input at the rectifier to output at the inverter. Sinac's compact design saves valuable floor space and simplifies in-line integration and retrofitting.

Range of coils
All Sinac systems can be fitted with a practically limitless range of coil designs. EFD Induction is a specialist at designing, testing and maintaining customized, long-life coils.

Advanced MMI
Sinac systems feature the latest in Man/Machine Interface control technology. The menu-based and multi-language control panel is easy to use. Fault diagnosis is accurate and displayed in clear text.

Power control
Output power in the Sinac 100 PM/PH can be controlled manually or via standard interfaces such as Profibus-DP, Modbus, 4-20 mA, etc. Control is achieved in real time, with a lag of only one millisecond. A chopper circuit is used to regulate power/voltage.

Easy maintenance
Sinac's modular design minimizes maintenance downtimes. Electrical and water connections are quick and easy. For added safety, the cooling water circuit is electrically insulated.

Frequency ranges
The Sinac 100 PM/PH offers up to four frequency ranges. Output frequency spans 0.3-200 kHz. Automatic frequency control maintains inverter performance.

APPLICATIONS AREAS

Sinac 100 PM/PH is a proven solution in a wide range of applications: brazing, shrink fitting, hardening, annealing, tempering, heat treatment, etc. Sinac is suitable for heating all kinds of electrically conductive materials such as copper, aluminum, steel, stainless steel, brass, titanium, etc.

TECHNICAL DATA FOR THE SINAC 100 PM/PH

Output	
Continuous output power	100 kW
Output power regulation range	2-100 %
Frequency range	0.3 -200 kHz
Supply	
Voltage MF/HF maximum	550 V
Supply voltage range	3 x 400 V+/-10%
Frequency	50/60 Hz
Nominal apparent power	115 kVA

Cooling	
Water consumption, min. (10 kHz)	36 l/min.*
Water consumption, max. (200 kHz)	60 l/min.*
Water pressure min./max.	3 min.-5 max. Delta P=3
Enclosure	
Outer dimensions (WxDxH)	800 x 600 x 2,000 mm
Enclosure protection	IP 54 - NEMA 12
Color	RAL 7035 Grey

Frequency > 170 kHz, dimensions are L 1600 x W 600 x H 2,000 mm

*May vary depending on coil design

Subject to modification