

iSONIC PULSE GEN B

Digital ultrasonic generators



Digital ultrasonic generators

iSONIC PULSE GEN B

Features, operation and technical data

The digital ultrasonic generators of the iSONIC PULSE GEN B series bring many other advantages in addition to fast and precise control of the process.

Advantages

Software-supported commissioning by the ultrasonic Diagnostic System (UDS).

Data collection and transfer through Profinet interface.

Integration into the machine control unit through the Profinet interface.

Optional remote access via router on the machine side and UDS to the generator possible.

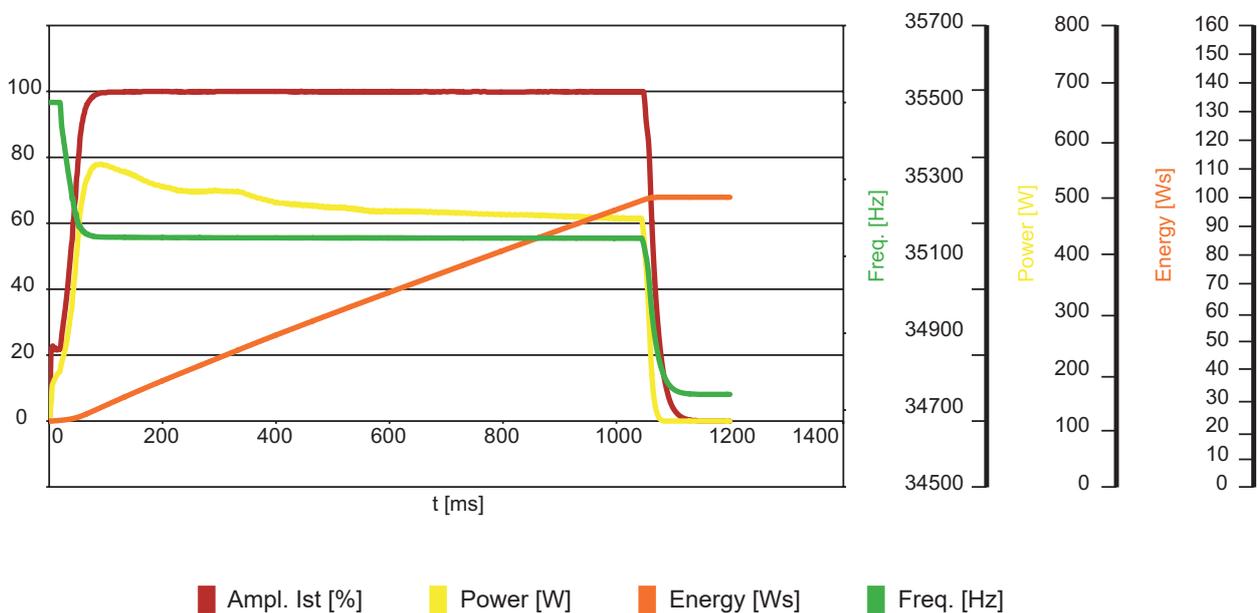


20 kHz

30 kHz

35 kHz

Application example: Visualization of welding curves with data from the PROFINET interface



With the iSONIC PULSE GEN B generator series, the entire application range of ultrasonic technology in plastics processing can be served.

Applications

- Ultrasonic welding, cutting, punching, riveting (staking) and embossing of thermoplastics, films and textiles
- Suitable for all types of industries

Functional characteristics

- Frequency tuning for every welding process
- Amplitude stabilization or power stabilization during the entire process
- Repeatable oscillation buildup performance
- External hardware start for the synchronization of multiple generators possible
- Programmable post-sonic signal
- Optional parameterizable control of the energy setpoints (thermal correction) in the event of external material and/or machine heating

Welding process

- Start signal
- Time
- Energy
- Contact

Monitoring process

- Time
- Power
- Energy
- Contact

Case

- Closed stainless-metal casing, IP20, for installation in a control cabinet
- Active cooling system
- All connecting cables from the front of the housing supplied

Hardware features

- Fully digital control with FPGA technology
- PFC power supply for reducing mains load with monitoring of undervoltage
- Temperature and overcurrent monitoring of the power module
- Profinet
- JTAG interface for service maintenance



- 1** SONOTRONIC service port
- 2** Status LEDs
- 3** RJ45 bushing for Profinet
- 4** USB connector
- 5** Start, contact shut-off, start release
- 6** 24 V PLC, 0 V PLC
- 7** Power connection 3 x 400 V ~ + N + PE
- 8** HF connector
- 9** ON/OFF switch



Infos online

Technical data: **iSONIC PULSE GEN B**

Digital ultrasonic generators

Technical data			
Working frequency* [kHz]	20 (+/-500 Hz)	30 (+/-500 Hz)	35 (+/-500 Hz)
Output power* [W]	2,000	1,800	400 / 800 / 1,200
Mains voltage [V], mains frequency [Hz]	230 (L, N, PE), 50/60		
Rated current [A]	10.6	11.0	2.4 / 4.3 / 6.0
Mains fuse [A]	2 x T 12.5 (internal)		
Switch-on duration	50 %	50 %	100 % / 50 % / 50 %
Case dimensions without mounting plate (w x h x d) [mm]	100 x 285 x 270		
Case dimensions with mounting plate (w x h x d) [mm]	100 x 333 x 271		
Weight [kg]	5.7		

* Selectable ultrasonic equipment of the iSONIC PULSE GEN generators
Subject to technical changes.

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