Celes MS3 Generator
Air-cooled induction heating

High efficiency portable generator

Air-cooled
Easy to use
Single phase 230V 50/60 HZ AC
For intermittent or continuous mode
High efficiency
Suitable for inductors made of Litz threads
The Celes MS3 Generator is cooled by air. Easy to use and operate, it is the designated generator for these high efficiency applications.

In induction heating systems, the overall efficiency is largely defined by the performance of the inductor. The Celes MS3 generator has been specially designed for air-cooled, high efficiency inductor.

Advantages of the Fives solution

Released from constraints associated with cooling of generators and inductors, the solution associating the generator Celes MS3 + inductor made of LITZ threads establishes the real revolution in induction heating, enabling to obtain ever equalled efficiencies, often superior to 90 %, according to the applications.

This decisive advantage confers on the solution its great mobility: the generator is connected to the single-phase electricity network and the whole set (generator + inductor) is not to be connected to a cooling water network.

Other advantages

Efficient connection to the grid
• Power Factor Correction Circuit: no rejection of reactive energy, signal remains sinusoidal.

User’s friendly Man Machine Interface
• Simultaneous display of setpoints, Status and alarms on color touch screen
• Simultaneous display of key operating values (P, U, I,F)
• PLC enabling programming and storage of numerous heating recipes

Performant process temperature control
By external temperature probe.

Flexibility and Operating Area
• Operating frequencies from 30 to 90 kHz as standard, other frequencies available on demand (option)
• Wide impedance range
• Secured operating limits

Examples of applications
• Shrink fitting
• Cap sealing
• Gluing
• Nano sciences research

Technical characteristics

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<tr>
<td>Nominal power</td>
<td>2.75 kW</td>
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<tr>
<td>Frequency</td>
<td>30 - 90 kHz</td>
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<tr>
<td>Power Supply</td>
<td>230 V / 110 V - 50/60 Hz outlet 16A</td>
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<tr>
<td>Cooling</td>
<td>Air, max air temperature 40°C</td>
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<tr>
<td>Dimensions / Weight</td>
<td>440 x 200 x 420 / 20 kg</td>
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It is to be noted that Celes MS 3 generator can operate high current inductors, by the means of a water-cooled adaptaion transformer, proposed as an option.