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EMBEDDED CONTROLLED CLASS D INVERTER FED INDUCTION HEATER

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Abstract

This paper presents the simulation and implementation of Class D inverter for Induction Heating with variable duty cycle at constant frequency. It is more suitable and acceptable for high-frequency induction-heating (IH). Detailed analysis and operation of this converter are presented. The simulation has been done with focus on the output current and output voltage waveforms. Digital simulation is done and the results are presented. The hardware is tested and the experimental results are compared with simulation results.

Keyword : Class D inverter, high-frequency inverter, resonant power source, induction heating.