



AK Tech Training and Placements

Transform Dreams into Reality

A Modular Low Current Ripple Electrolysis Power Supply Based on Multiphase Half-Bridge High-Frequency Inverters

In this project, a modular low current ripple DC power supply topology based on multiphase high frequency inverter and its control method is proposed. The topology of the electrolysis power supply consists of ac-dc converter and dc-dc converter. Among them, the dc-dc converter is composed of a plurality of modular small-capacity dc-dc conversion modules connected in parallel. Each dc-dc conversion module is composed of a half-bridge high-frequency inverter and a full-wave rectifier. By controlling the output voltage of the high-frequency inverter in each dc-dc conversion module and staggering the equal phase angle in sequence, the low-frequency harmonic components in the dc voltage at the output terminals of multiple dc-dc conversion modules are eliminated. The proposed system is simulated by using MATLAB/SIMULINK.

Domain: Power Systems solar Power Generation

Technology: Electrical