

Title: Dual-conversion inverter to increase voltage

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In this paper, a new triple two-level inverter was proposed to increase the DC-voltage conversion ratio and to suppress current distortion. By controlling the condition of both capacitors, ...

Among these advancements, multilevel inverters (MLIs) have emerged as a key innovation, offering substantial advantages over traditional two-level inverters, particularly in high ...

Double conversion UPS modules provide uninterrupted power to critical loads. They do this by filtering and converting incoming utility power to DC power, then converting the DC power to a perfect AC ...

In this study, a Dual-Input Single-Output (DISO) converter is introduced to integrate various sources and achieve an increased output voltage gain by charging the inductors in parallel and ...

With its flexible functionality, the converter proves suitable for a wide range of applications, including energy storage platforms, electric transportation, and renewable energy technologies.

The increase in output levels is achieved by modifying the switching scheme of the same inverter topology, which requires one DC voltage source, two SCs, two DC-link capacitors, and ...

By integrating switched-capacitor (SC) units with DC-AC converters, it can offer advantages over conventional two-stage conversion systems, including improved efficiency, optimal ...

The main benefits of the modified converter include continuous output current and reduced voltage stress across switches, making the modified Dickson charge converter ideally suited for renewable ...

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