

Dual frequency intelligent inverter output voltage





Overview

This paper is an attempt to provide a dual-source inverter, an intelligent inverter topology that links two isolated DC sources to a single three-phase output through single-stage conversion. The converter i.

What is a dual-source inverter?

This paper is an attempt to provide a dual-source inverter, an intelligent inverter topology that links two isolated DC sources to a single three-phase output through single-stage conversion. The converter is designed to be utilized in hybrid photovoltaic fuel cell systems, among other renewable energy applications.

How to control the output voltage of multi-level inverters?

In Barkati et al. (2008), Various methods have been proposed to control the output voltage of multi-level inverters and reduce undesirable harmonics, including pulse width modulation (PWM) and space-vector pulse width modulation (SVPWM).

What is a dual-input dual-output inverter?

Reference 14 describes a dual-input dual-output inverter with nine switches, allowing each source to supply a separate load. In the topology presented in Ref. 15, the input sources cannot have random voltage or current levels. Two dual-input single-output three-phase inverters are discussed in Refs. 1, 2.

Can a multi-level inverter improve power quality?

In Prasad and Dhanamjayulu (2022), one of the power quality problems is the integration of renewable sources in the network, which causes voltage and current harmonics. This article uses a series compensator with a multi-level inverter, which increases reliability and reduces THD.



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