

Dual DC power supply inverter





Overview

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.

What is a dual inverter topology based on quasi-isolated power supply?

A dual inverter topology based on quasi-isolated power supply is proposed in this paper, and its control strategy is studied. This topology combines the advantages of traditional dual inverters. By controlling the output voltage of the auxiliary converter, the dual inverter can output four or five levels.

How many types of dual inverters are there?

There are two types of widely used dual inverters: the common DC bus and the independent DC bus. The independent DC bus type is shown in Fig. 1 a. In this configuration, the power supply of the two inverters is independent of each other, and there is no Zero-Sequence Component (ZSC).

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.



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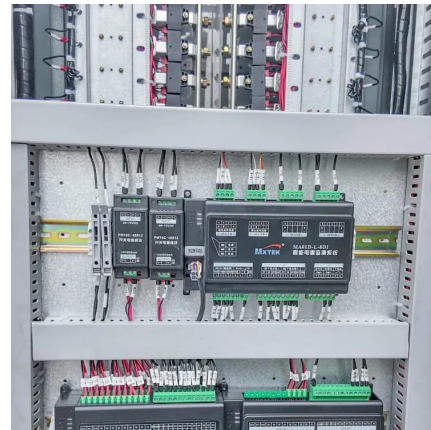


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