

Dual inverter voltage superposition





Overview

What is a triple two-level inverter?

To address the above issue, a triple two-level inverter is proposed in this paper. The proposed inverter adopts a switched-capacitor boost circuit to boost the AC output voltage and to generate a multi-level voltage. Simultaneously, a three-phase full-bridge circuit is assigned to convert the DC voltage into AC voltage.

How does an inverter generate a multi-level voltage?

The proposed inverter adopts a switched-capacitor boost circuit to boost the AC output voltage and to generate a multi-level voltage. Simultaneously, a three-phase full-bridge circuit is assigned to convert the DC voltage into AC voltage. In addition, a novel space vector modulation strategy is introduced to achieve capacitor voltage self-balance.

What are the parameters of an inverter?

The specific parameters of the inverter are as follows: the fundamental frequency of the output voltage is 50 Hz, the switch frequency is 10 kHz, the DC-source voltage is 50 V, and the on-state resistors of the power switches and diodes are 0.4 Ω and 0.9 Ω , respectively.

What is single-phase supplied dual-inverter drive system?

our of the single-phase supplied dual-inverter drive system is described in detail. Basically, the drive system must operate the machine at the desired average speed, while on the one hand, PFC operation must be guaranteed at the input, and on the other hand, the DC-I



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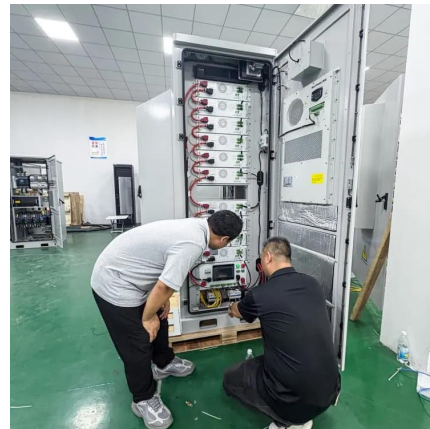


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