

Title: Modulation of the voltage source inverter

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Proposed algorithm would provide the duty ratio values that generate the required average values of the phase voltages out of the available inverter input voltage, anyhow.

This type of low-power signal cannot drive an AC motor. Therefore, in practice, we must use a three-phase inverter to amplify the microcontroller's output, converting it into a three-phase AC voltage ...

Summary This paper proposes a single-stage three-phase quasi-Z-source inverter with strong boost ability and three new kinds of simple boost modified space vector modulation (SVM) strategies. ...

This paper aims to show the advantages of such modulation index tuning and its impact on the THD of the line-to-line voltages, the temperature of the DC link capacitors, the efficiency, and the dead-times ...

Pulse width modulation in voltage source inverters with an arbitrary number of phases is analyzed in this paper. The problem is treated as purely algebraic, without any use of space vectors.

Abstract The core of most power electronic systems involving DC/AC conversion is a voltage source inverter (VSI) that runs on some pulsewidth modulation (PWM) strategy.

This paper examines the performance of three power converter configurations for three-phase transformerless photovoltaic systems.

The maximum modulation index is defined here as the ratio between output phase-to-neutral voltage (peak) of the fundamental component and the DC-link voltage except for when the inverter is over ...

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