Solution to DC circulating current in parallel inverter

Thus, the circulating current suppression becomes a key research problem for parallel inverters. In general, the circulating current suppress strategies can be categorized as ...

Abstract-- This paper analyzes the imbalances that produce circulating current in a system of two three-phase Voltage Source Inverters (VSI) with Space Vector Pulse Width Modulation ...

This paper proposes an advanced control strategy to eliminate both current sharing error and DC circulating current caused by line impedance mismatched and ...

A switching sequence with a small circulating current was selected from the available five-level space vectors, reducing the instantaneous circulating current between the ...

In this paper, a circulating current reduction control method applicable to an inverter in which two or more inverter modules are connected in parallel is proposed.

Downloaded from vbn.aau.dk on: December 31, 2025 A Circulating-Current Suppression Method for Parallel Connected Voltage Source Inverters (VSI) with Common DC and AC Buses

In this work, a control technique for the elimination of the low-frequency components of the circulating currents in grid-connected inverters is presented. The proposed ...

The circulating current can be avoided by providing galvanic isolation between the parallel VSCs using multiple winding line frequency transformer [6], [7]. Another approach is to suppress the ...

These harmonic components of circulating current influence the inverter life cycle, and it can limit the power

rating of the total parallel-connected inverter. This study analyzes the circulating ...

In this paper, a circulating current reduction control method applicable to an inverter in which two or more inverter modules are ...

Connecting inverters in parallel is a common method for increasing current capacity. Due to the difference in the delay time and on-voltage of the gate circuit.

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