Three-phase inverter parallel circulation control

In this paper, by developing and analyzing the averaged model of the circulating current dynamics for parallel three-level inverters, it"s found that the difference between the zero sequence duty cycles is ...

In this study, according to zero-sequence current modelling of fourth leg, the control strategy for suppressing circulating current is proposed.

In order to effectively suppress the generation of circulation, this paper proposes a multiple proportional resonance control strategy for the parallel three-phase inverter system, that is, the voltage outer loop ...

In this paper, modeling of the parallel grid-connected three-phase inverters and the cause of the zero-sequence circulating current are presented in detail.

There exists interconnection between these two issues in the paralleled 3P2L inverters. To suppress the CMV and circulating current simultaneously, an improved control method is presented.

When connecting two parallel three-phase voltage source inverters between the same DC power supply and AC bus, a zero-sequence circulating current will occur.

Abstract: This paper introduces an innovative methodology for designing a synergetic controller (SYC) aimed at eliminating circulating currents and regulating speed in two parallel-connected three-phase ...

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 control structure ...

The proposed control method could be implemented by using analogue design and related to 400 Hz paralleled inverter systems. Both simulation and experimental results indeed show the effective-ness ...

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