

Title: Voltage source inverter commutation

Generated on: 2026-06-12 14:26:00

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Abstract--This paper presents a single-stage bidirectional high-frequency transformer (HFT) link dc/ac converter topology for a three-phase adjustable magnitude and frequency PWM ac drive.

Silicon-controlled rectifiers are of two kinds based on their commutation techniques. The commonly used types include line commutated and forced commutated.

To monitor the power factor, voltage and current levels, the signal is measured measurable on both the AC and DC sides of the station. Upon receiving this information, the converter ...

By understanding the influence of commutation on inverter efficiency and comparing various options, engineers can make informed decisions to optimize power ...

Different techniques for computing duty cycle are referred to as commutation techniques, which are the primary focus of this paper. Duty cycle calculation may be ...

For high-speed BLdc drive, using voltage source inverter (VSI) with the pulsewidth modulation (PWM) technique will also lead to PWM update delay that causes inaccurate ...

The problems which are induced by commutations in the voltage-source inverter vary according to whether PWM is used or not. If PWM is not used, the commutation problems are the same ...

A voltage-source converter (VSC) is defined as an HVDC converter that utilizes insulated-gate bipolar transistors (IGBTs), enabling self-commutation and controlled turn-on and turn-off ...

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