DEVELOPMENT OF SWITCHED RELUCTANCE DRIVE INVERTER

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ABSTRACT

This project investigates a modified single-phase switched-reluctance drive inverter. The inverter uses two switches as the conventional half-bridge type but commutation is controlled by a thyristor and capacitor. Boost voltages are produced during current rise and fall periods. The project analyses the effectiveness of self commutation of the thyristor based on the natural-frequency oscillation of the boost capacitor and motor winding circuit. The project involves circuit simulation using P-Spice and experimental study.

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CONTENTS