

HIGH AND MEDIUM VOLTAGE INDUCTION MOTOR DRIVE APPLICATION WITH DIFFERENT MULTILEVEL INVERTER TOPOLOGIES

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ABSTRACT

In this paper two different multi level inverter topologies for Induction motor drive are presented. A hybrid pulse width modulation combining the merits of both space vector PWM (SVPWM) and selective harmonic elimination PWM (SHEPWM) is designed for first topology which contains neutral point clamped multilevel inverter. Another topology contains a simple cascaded H-bridge inverter with improved performance in the aspect of THD content. A comparative study and conclusion is been carried out at the end of this paper.

KEYWORDS: Multi Level Inverter, SHEPWM, SVPWM, Neutral Point Clamped Multi Level Inverter, Cascaded H-Bridge Inverter, THD