Multi level inverter fed indirect vector control of induction motor using type 2 fuzzy logic controller

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The paper presents an indirect vector control of induction motor fed by three-level diode clamped inverter and is implemented using fuzzy logic speed control system based on fuzzy logic approach at different operating conditions to obtain improved performance. The analysis, design and simulation using MATLAB for indirect vector control of induction motor are carried out based on fuzzy set theory. The PI controllers in the IVC are replaced with T2FLC. Space vector pulse width modulation is used to obtain gate switching pulses for induction motor. The speed response of induction motor drive using T2FLC shows faster and better response.

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