Abstract

Induction motors are widely used in both household and industrial application due to their high torque to volume ratio, ruggedness, robustness and low maintenance. Induction motor draws a
Starting Analysis of Induction Motor using SPWM

high starting current during starting period which affects on Electromagnetic Torque, Speed & Current. Traditional methods includes DOL, auto-transformer starters, star-delta starters etc, control these parameters up to certain limit. Thyristorised based switching techniques include SPWM, SV-PWM and Hysteresis band PWM also suggested, to reduced variation in parameters at start. This paper deals with starting analysis of induction motor using DOL as a traditional mechanism and sinusoidal pulse width modulation (SPWM) as a thyristorised based advanced mechanism. Analysis is made for speed, torque and current during start. Simulations are made in MATLAB Environment and comparative results are estimated.

References

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Index Terms

Computer Science

Applied Sciences

Keywords

Induction Motor  Starting Analysis  Dol  Spwm.