

TRANSIENT AND STEADY STATE PERFORMANCE OF VSI FED 3-PHASE SQUIRREL CAGE INDUCTION MACHINE

ABSTRACT

Study the transient and steady state performance of a CSI fed three phase squirrel cage induction motor.

(a) Record the voltage and current waveform at different frequencies and THD of voltage and current.

(b) Record rms voltage, rms current, power, power factor, and THD of voltage and current at two different frequencies at different loads and plot (i) I_s vs Torque (ii) pf vs torque (iii) Efficiency vs torque (iii) Efficiency vs torque and (iv) speed vs torque.

(c) Measure the parameters of a 3 phase cage motor for simulation.

(d) Simulate instantaneous three-phase voltages and currents waveform and THD of them of parts (a) and (b) and compare.

