FOUR SWITCH THREE PHASE INVERTER FED INDUCTION MOTOR WITH POWER FACTOR CORRECTION

S. SARAVANA SUNDARAM AND K. THANUSHKODI

Abstract

This paper presents Performance of a Four Switch Three Phase Inverter fed Induction Motor with Power factor Correction. A power factor correction converter was suggested at the input to correct the power factor on the input side. The conventional circuit is improved by introducing boost converter at the input side. The performance of Induction motor operating with the abovementioned converter is studied. By digital simulation the characteristics of the Induction motor system are investigated theoretically. The simulation results are compared with the theoretical results.

Keywords: Induction motor, PFC Converter, Boost Converter, PWM Inverter, Harmonics.