Abstract

This paper presents simulation model of a single phase simplified eleven-level inverter (SELI). Multilevel inverter offers high power capability. Its performance is highly superior to that of conventional two-level inverter due to reduced harmonic distortion, lower electromagnetic interference and higher dc link voltage. The inverter is capable of producing eleven levels of output voltages (Vdc, 4Vdc/5, 3vdc/5, 2Vdc/5, Vdc/5, 0, -Vdc/5, -2Vdc/5, -3Vdc/5, -4Vdc/5, -Vdc) from the DC supply voltage. Theoretical predictions are validated using MATLAB Simulink tool box.

References


Index Terms

Computer Science
Applied Sciences
Keywords

Capacitor clamped  diode clamped  multilevel inverter  H-bridge  Simplified Eleven-level Inverter (SELI).