TJPRC: International Journal of Signal Processing Systems (TJPRC: IJSPS)
Vol. 2, Issue 1, Jun 2016, 23-30

COMPARITIVE ANALYSIS OF CASCADED H-BRIDGE MULTILEVEL INVERTER WITH DIFFERENT PWM TECHNIQUES

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ABSTRACT

The Multilevel inverters can synthesize output AC waveform with better harmonic spectrum and faithful output. In this paper a comparative study is carried out for cascaded H-bridge multilevel inverters with different line shifted modulation techniques such as Phase Disposition (PD), Phase Opposition Disposition (POD) and Alternative Phase Opposition Disposition (APOD) and the Total harmonic distortion (THD) of the phase output voltages are observed for various modulation index in MATLAB/SIMULINK background. The results obtained with different modulation techniques are compared in terms of Total harmonic distortion (THD) at different modulation indices.

KEYWORDS: Cascaded Multilevel Inverter, PWM Techniques, Total Harmonic Distortion (THD)

Received: Mar 28, 2016; **Accepted:** Apr 08, 2016; **Published:** Apr 18, 2016; **Paper Id.:** TJPRC: IJSPSJUN20163

Original Article