Five-phase voltage source inverter

This paper analyses different space vector PWM (SVPWM) schemes for a five-phase VSI, which can be used for five-phase motor drives. A detailed model of a five-phase VSI is presented first in terms of ...

Summary This paper compares four modulation strategies applied to five-phase voltage source inverters (5PH-VSI).

This study compares the 2L + 2M and 6L SVPWM algorithms applied to a five-phase two-level voltage source inverter fed by an inductive load. The comparison is based on testing the ...

The author uses only two large vectors in this paper for a five-phase voltage source inverter. Vector diagram, switching table, and switching waveform have presented for two adjacent...

Abstract: This paper develops discontinuous space vector PWM (DPWM) technique for a five-phase voltage source inverter (VSI). Space vector model of a five-phase VSI shows that there exist 32 ...

A novel mathematical model and steady-state analysis of a five-phase voltage-source inverter with PWM output voltage control are proposed in this paper. The mathematical model is ...

In this paper, a Four Dimensional Space Vector Modulation is implemented for five phase Voltage Source Inverter to improve the performance of the inverter and to minimize the CMV level ...

Keywords: space vector pulse width modulation, five phase VSI, total harmonic switching, simulation distortion, oposes pulse width modulation schemes for a two-level five-phase voltage source inverter. ...

A five phase five leg 10 switch inverter fed five phase star connected load operating with five different excitation is simulated and compared with that of three phase conventional inverter.

The paper presents a new conception of applying a system configuration of two machines supplied by a five-phase inverter with a common leg.

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