

## عنوان مقاله:

DTC Drive of Induction Motor using Three- Level Inverter with Optimized Switching Table and Minimizing the Deviation of Neutral Point Voltage

## محل انتشار:

اولین کنفرانس بین المللی الکترونیک قدرت و سیستم های درایو (سال: 1388)

تعداد صفحات اصل مقاله: 6

## نویسندگان:

Sadeghi Larijani - *Power Electronic and Protection Laboratory (PEP Lab.), Faculty of Electrical and Computer Engineering Tarbiat Modares University*

Shahparasti - *Power Electronic and Protection Laboratory (PEP Lab.), Faculty of Electrical and Computer Engineering Tarbiat Modares University*

Fatemi - *Power Electronic and Protection Laboratory (PEP Lab.), Faculty of Electrical and Computer Engineering Tarbiat Modares University*

Amiri - *Power Electronic and Protection Laboratory (PEP Lab.), Faculty of Electrical and Computer Engineering Tarbiat Modares University*

## خلاصه مقاله:

This paper investigates the switching-table based direct torque control (ST-DTC) drive of induction motors using a three-level neutral-point clamped inverter. A novel optimized switching table for ST-DTC is proposed regarding the effects of motor speed and load on torque changes. Furthermore, for deviation of neutral point voltage in three-level NPC inverter, an innovative closed loop control method is introduced that is not only straightforward in implementation, but is also capable of restricting voltage fluctuations in the specified limit. Simulation results are provided to confirm the performance of proposed strategies

## کلمات کلیدی:

Induction motor, direct torque control, neutral point voltage, optimized switching table, three-level NPC inverters

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/152777>

