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OUTPUT VOLTAGE SIMULATION OF MULTILEVEL INVERTER WITH SPACE VECTOR MODULATION OF TWO DELTA VOLTAGES

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Abstract

One of the implementation variants of the algorithm of the space vector pulse-width modulation of the two delta voltages of the multilevel autonomous voltage source inverter, using the five-segment sequence of the three vectors switching is offered. The diagrams of the dependences of the output voltage THD and integral factors of harmonics on the amplitude modulation index are obtained for the various values of the frequency modulation index as a result of Mathcad simulation. References 4, figures 5.

Key words: voltage source inverter, PWM, space vector modulation, oblique-angled coordinates, voltage THD, integral factors of voltage harmonics.

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