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# Modulation method of voltage source inverter





## Overview

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What is voltage source inverter?

conditioners and distributed generations systems (DGS). Voltage source inverters are inherently efficient, compact and economical devic used to control power flow and provide quality supply. Keywords— Voltage source inverter, Sine Pulse Width Modulation, Pulse Width Modulation, Weighted Total Harmonic Distortion, Distor.

What is a modulation strategy for VSI?

**III. MODULATION TECHNIQUES FOR VOLTAGE SOURCE INVERTERSThe** main objective behind adopting control strategies is to generate good quality controllable AC voltage and to minimize the harmonic dis ortion, switching losses and the filtering requirements. Various modu ation techniques for VSI are reported in the literature. The modulation strategy.

Which PWM method is selected for switching a voltage source inverter?

For a certain value of modulation index, the PWM method with the lowest THD will be selected for switching the voltage source inverter. For moderate and higher ranges of modulation index, BCPWM and ABCPWM respectively offer the lowest THD and are therefore selected.

What is modulation index?

The modulation index, conventionally labeled as  $m$ , should not be confused with normalized phase voltages  $m_k$ , and represents (6) in its normalized form. the expected maximal line voltage equal to  $V_{dc}$ , as achieved in the single phase case. This motivated space vector approach to increase the maximum of the generated line voltage amplitude for 15.5%.



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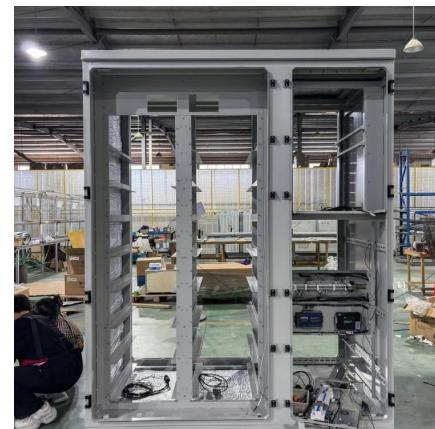


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