
This paper proposes a control method for reducing the total harmonic distortion (THD) of the grid current of three-phase grid-connected inverter systems when the grid voltage is distorted.

This paper proposes a Discontinuous current mode (DCM) feedback current control for the grid-connected inverter in order to achieve the low THD of the grid curr

This study proposes an optimal harmonic compensation method that flexibly adjusts the compensation coefficients for each harmonic current, solved by constructing the ...

This results in significant changes of switching losses and changes in the total harmonics distortion (THD) of the grid current. In this study, the switching losses and the current THD of ...

This allows the converter"s output voltage to compensate for the harmonic components in the grid, achieving the improvement of grid current and reducing the total ...

In particular, PV systems should have low current harmonic distortion to assure that no adverse effects are caused to other equipment connected to the utility grid or the microgrid. The ...

This paper investigates three topologies --H4, H5, and HERIC-- with the comparisons between their CMV, differential mode voltage (DMV), total harmonic distortion (THD), and leakage current.

The proposed approach allows deriving an equation to predict the behavior of the current injected into the grid and estimate its harmonic distortion, becoming an important tool ...

In this paper, a simple method that the output current is decomposed into a fundamental component and ripple currents is proposed to estimate the current THD for small-scale grid ...

In this paper we investigate a new modulation technique for the control signals of grid-connected PV inverters. The inverters are connected to the grid via an L-filter.

Web: https://ruedasenmadrid.es