

PDEOZE PowerContainer

High power inverter test



Overview

In this guide, we explain how to test an inverter with a multimeter step by step, focusing on the power input, DC bus voltage, IGBT modules, capacitors, and output terminals. What is inverter testing?

Objectively observing and testing the performance of the inverter, using the inverter testing tools reasonably, and paying attention to the precautions in the inverter testing can effectively detect the working efficiency of the inverter, discover and solve problems in time, and improve the service life of the inverter.

How do you test a PV inverter?

To test a PV inverter according to IEC 62093, identify a suite of accelerated tests to identify potential reliability weaknesses. Develop recommendations for how the tests are to be performed, including sample size, environmental test conditions, duration, power and monitor, etc. Provide a baseline for comparison of reliability performance between PV inverter manufacturers.

What tools do I need to do inverter testing?

Wattmeter: A wattmeter is an instrument used to measure power in a circuit, accurately measuring the input power (DC side) and output power (AC side) of the inverter to evaluate the efficiency of the inverter.

What data should be recorded during the inverter testing process?

Record inverter testing data: During the inverter testing process, record various parameters, such as input/output voltage, current, power and waveform quality, in order to analyze the performance state of the inverter.

Why should inverter testing be placed in a well-ventilated environment?

The inverter testing should be placed in a well-ventilated environment to ensure efficient inverter cooling or it may result in false inverter testing. When the heat dissipation system of the inverter cannot effectively dissipate heat,

the performance parameters of the inverter may change abnormally.

Why is inverter important?

Inverter is an important equipment to convert direct current into alternating current, which is widely used in many scenarios, such as solar power generation system, wind power generation system and uninterruptible power supply system. It is difficult to avoid various failures in the long-term operation of the inverter.

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