

Inverter DC side over-allocation





Overview

What causes coupling in DC side of photovoltaic inverter?

There are multiple fault causes coupling in DC side of photovoltaic inverter. The changes of voltage, current and power are derived by fault mechanism analysis. The differences of failure feature are used to locate the fault cause.

How can a multi-inverter control system improve the permeability DG power supply?

The proposed control strategy can reduce the order of the inverter control system, restrain the resonant peak value of the system, further improve the stability of the multi-inverter parallel system, and make it more suitable for the power grid system with high permeability DG power supply.

What is DC overvoltage fault in inverter?

2.2. DC overvoltage fault The condition of DC overvoltage fault in inverter is that the DC capacitor voltage exceeds maximum allowable voltage U_{max} and maintains for a period of time, which triggers overvoltage protection and causes the inverter to stop.

How to limit output level of inverter?

In order to limit output level of inverter, there is often a limiter in control circuit. The inverter output dq axis voltage u_d and u_q after passing through current inner loop are used as the input of sinusoidal vector pulse width modulation (SVPWM), and then realizes the conversion from DC to AC. Fig. 2.



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