

Power Convertor

ABSTRACT

5 A virtual synchronous generator controller (207) included in a controller (110) of a power convertor generates a first command value (f_{vsg}) of a frequency of a second voltage and a second command value (θ_{vsg}) of a phase of the second voltage by making an active power value (P_{out}) and an active power target value (P_{ref}) correspond respectively to electrical energy and mechanical energy of a motion
10 equation of a rotor of a synchronous generator to simulate an operation of the synchronous generator. When a turn-on condition is satisfied, a determination unit (208) switches a connection state from a non-conduction state to a conduction state by controlling a relay that causes the connection state between an inverter and an AC power system to be selectively switched between the conduction state and the non-
15 conduction state. The turn-on condition includes: a first condition that an amplitude difference between an absolute value of a first measurement value (V_o) and an absolute value of a second measurement value (V_{fo}) is included in a first tolerance; and a second condition that a phase difference between the phase of a first voltage (V_o) and the second command value (θ_{vsg}) is included in a second tolerance.

20 [Fig. 2]