

FTC Energy Dynamic Power Controller Block Diagram

Typical Components



90 Amp Solid State Relay (SSR)



IGBT Voltage Module

Operation

The FTC Energy generator has multiple DC outputs. These outputs are combined in a parallel and/or series configuration to apply the proper voltage and current to the inverter. The configuration is dynamically altered based on the available wind energy and the inverter needs.

The IGBT Power Controller (IPC) is set to the optimal requirements of the inverter. It also prevents over-voltage damage to the inverter. In other words, the inverter is supplied with a virtually constant voltage.

The IPC reads the power available from the generator and sets the state of the multiple Solid State Relays inside the SSR Switcher to ensure the correct power is available. Because the IPC is dynamically controlling the flow of power, there is no sharp transient spikes when the relays shift from one configuration to another as the wind energy goes up and down.

FTC Energy Generator

