SolarTech Power Solutions

The model of the generator in a power station is sf120

Overview

What is a station startup transformer?

Station Startup Transformer The Station Startup Transformer is a power transformer used to connect the power station to the transmission system so that power is available for the plant equipment when the plant is being started.

How does a generating system work?

In this system, generators will be connected to a common bus and the auxiliary transformers for all generating units will be fed from that common bus. This bus may have one or more other power sources to serve for station startup. Figure 1 is a typical one-line diagram for such a system.

What is a generator in a power system?

Generation is the part of power system where we convert some form of energy into electrical energy. This is the source of energy in the power system. It keeps running all the time. It generates power at different voltage and power levels depending upon the type of station and the generators used.

How is the output of a generator connected?

The output of the generator is connected to the isolated phase bus duct shown as a green line. The isolated phase bus duct connects the output of the main generator to two other components: the step-up transformer and the station auxiliary transformer.

What are the basic models of a synchronous generator?

This chapter considers detailed models of a generator including machine model, excitation, and prime mover controllers. It is common to express voltages, currents, and impedances in per-unit quantities by choosing appropriate base quantities. The stability of power systems is affected by rotor

swings of the synchronous generators.

Which type of generating station should be chosen?

So, as we know the type of load and approximate amount of load at the station, different type of generating station is chosen. For example; Thermal plant, Hydel plant, Nuclear plant, Solar plant, Wind plant and Tidal plant are chosen to handle the base load on the system whereas Gas plants, Diesel plants are used to handle peak load demand.

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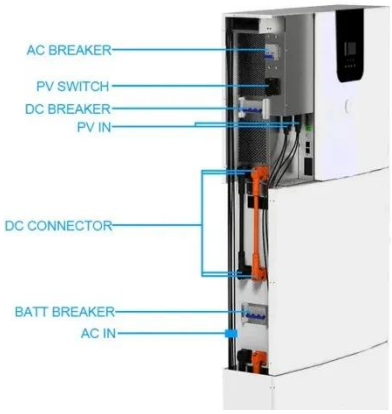

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