
Static Synchronous Compensator (STATCOM)



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is a parallel type of FACTS device for reactive power compensation, which can emit or absorb reactive power, and its output can vary to control specific parameters in the power system.

Generally speaking, it is a solid-state switching converter. When its input terminal is connected to a power supply or energy storage device, its output terminal can independently emit or absorb controllable active and reactive power; It can improve the functions of the power system in the following aspects: dynamic voltage control, power oscillation damping, transient stability, voltage flicker control, etc. Compared with traditional reactive power compensation devices,

STATCOM has the advantages of continuous regulation, small harmonics, low losses, wide operating range, high reliability, and fast regulation speed,

Static Synchronous Compensator (STATCOM) Device characteristics

Dynamic voltage control in transmission and distribution systems;

Power oscillation damping in transmission systems;

Improvement of transient stability of the power system;

Active power and reactive power control. Not only does it have the ability to control reactive power, but if necessary, it can also control active power (which can obtain DC power).

Static synchronous compensators have other advantages, as follows:

Small size (compact electronic converter replaces passive components);

Factory modular products (reducing installation and debugging time);

Adopting packaged electronic converters (reducing the impact of the environment on the equipment).

Static Synchronous Compensator (STATCOM) Technical data

System output:	Unlimited
Nominal Voltage:	All voltages via transformer 3KV,6KV,10/12Kv,24/36KV etc.
Connection:	Parallel connection of 10 devices
Harmonics:	Up to 21th at 95%
Communications:	TCP/IP, RS485, ...
Operational modes:	- ALL - All but no fundamantal - Selected harmonics
Power rate	0.1Mvar 0.3Mvar 0.5Mvar 0.8Mvar 1.0Mvar 1.5Mvar 2.0Mvar 2.5Mvar 3.0Mvar 5Mvar Other rates are available on request