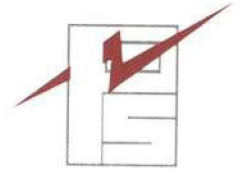


SinE-Series Static Var Generator



General information

SinE-Series Static Var Generator, operates on the base of a three-level topology circuit, provide power quality solutions such as stepless power factor correction, eliminate harmonic and load balance. The capacity of SVG modular from 20kVar to 150kVar, and allows 20 modules to connect parallel, and users can easily get the target filter current capacity.

Product value :

- Eliminate the harmonic current of nonlinear load
- Improve the operating efficiency of the power system and reduce the downtime of the power distribution system, especially for low-voltage systems with frequent load upgrades
- Meet the strict requirements of Utilities for electrical energy quality, avoid fines and power supply interruptions caused by electrical quality problems, and reduce carbon dioxide emissions



Features

- The rate factor value can reach >0.99 , and will not cause over-compensation and under-compensation
- Ultra-fast dynamic compensation, full response time less than 10ms
- Active compensation device to avoid resonance
- Can be combined with capacitors to form a hybrid compensation scheme
- Active power compensation equipment

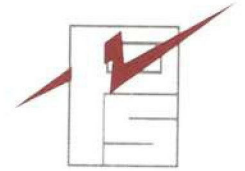
Typical applications

- Fast inductive and capacitive reactive power compensation, and can balance three-phase loads and eliminate harmonics
- Data Center and UPS system
 - New energy power generation, e.g. PV and wind power
 - Precision equipment manufacturing, e.g. single crystal silicon, semiconductor
 - Industrial production machine
 - Electrical welding system
 - Plastic industrial machinery, e.g. extrusion machines, injection molding machines, etc.
 - Office building and shopping mall

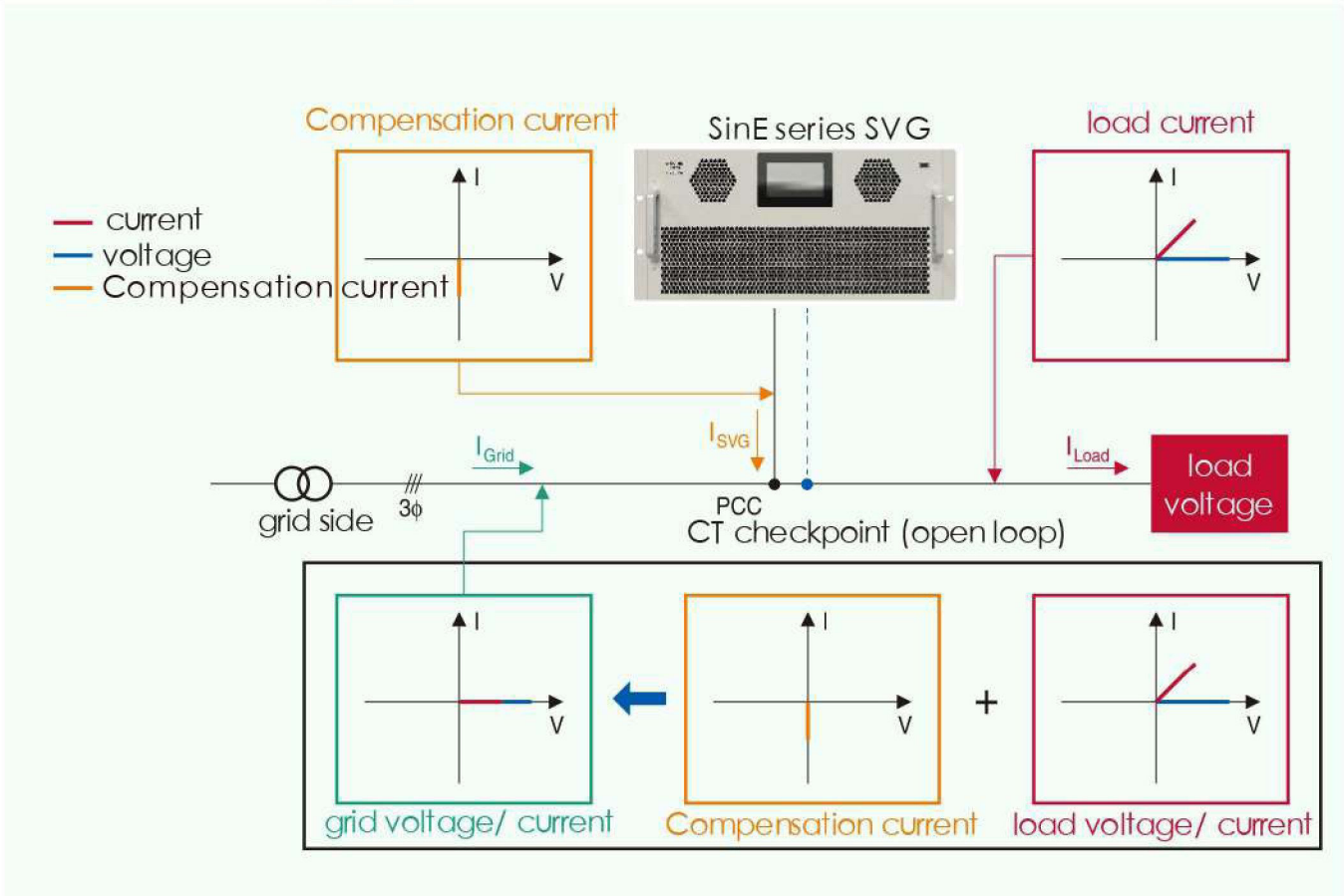
Safety features

- Highest safety and reliability
 - Overload protection
 - Internal short-circuit protection
 - Overheating protection
 - Overvoltage and undervoltage protection
 - Inverter bridge protection
 - Resonance protection
- Fan fault alarm

SinE-Series Static Var Generator



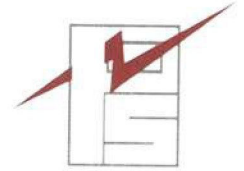
Static Var Generator Working principle



SinE-Series SVG load balancing for 3P3W and 3P4W



SinE-Series Static Var Generator



Technical data and specifications

Rated Voltage	200V	400V	480V	690V
Grid voltage range	-20%~+20%	20%~+20%	Max Voltage 500V	-20%~+10%
Individual module capacity (kVar)	25、 50、 75	35、 50、 75、 100、 150		120
Frequency	50/60Hz (-10%~+10%)			
Overall efficiency	>97%			
CT configuration	Closed or open loop (Open loop is recommended in case of parallel operation)			
Overall response time	<7.8ms			
Grid type	3P3W, 3P4W			
Overload capacity	110%-Continuous operation,120%-1min			
Circuit topology	3-level topology			
Switching frequency	20 kHz			
Modularity	Maximum 20 units can be combined			
Redundancy	Master/master or master/slave arrangement			
Typical power losses	< 2.5% (depending of the load)			
Target power factor	Adjustable from -1 to 1			
Harmonic compensation	Available			
Unbalance compensation	Available			
Display	1.8/4.3/7-inch HMI (Optional)			
Communication ports	RS485 Modbus (RTU)			
Noise level	< 69 dB (depending on the load and model)			
Altitude	Derating usage >2000m			
ambient temperature	Operating Temperature: -35°C~55°C, Derating usage above 55°C			
Humidity	Storage temperature: -45°C~70°C			
	5%~95%RH, non-condensing			
Protection class	IP20			
Design/Approvals	EN 62477-1(2012), EN 61439-1 (2011)			
EMC	EN/IEC 61000-6-4, Class A			
Certification	CE, CQC			

*When the rated voltage is 200V, the reactive power compensation capacity is 50% of the compensation capacity of the rated voltage level of 400V.