

Static Var Generator

SFR-SVG Cabinet

Overview

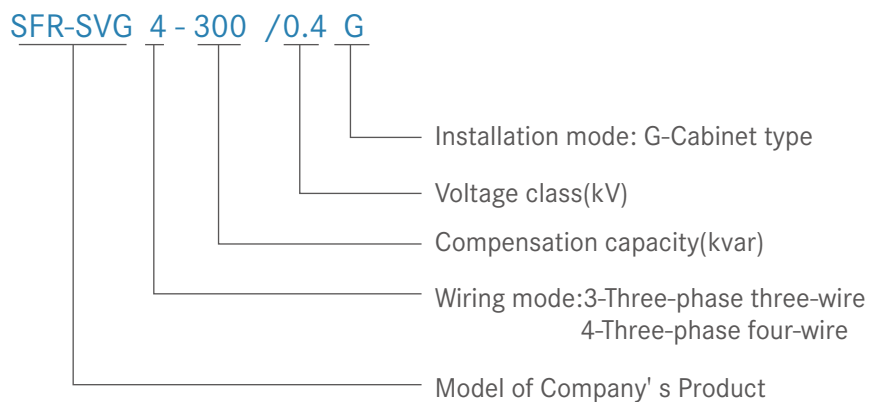
SFR-SVG is a new-generation product of Static Var Generator(SVG), it used the latest technology application for the reactive power compensation. When the SFR-SVG parallel in the grid, it equalized as a dynamic reactive current source. The reactive current of the SVG could be flexibly controlled and compensate the reactive power automatically.



Advantages

- Modular design, easy to expand
- 7"/10" inch LCD touch screen
- Before/After compensation comparison on LCD display
- Support anti-harmonic function to ensure system safety
- Dynamic continuous smooth compensation
- Current source characteristics
- Solve the imbalance problem synchronously
- It can compensate harmonic wave dynamically while compensating reactive power
- Total response time < 5ms and faster control
- Excellent protection for equipment and system
- Supports parallel connection of modules with different capacities
- The protection level can be customized, adapt to various environments

Model Description



Model Selection

Table of Rapid Model Checking of SVG

Transformer Capacity (Kvar)	Three-phase Four-wire	Three-phase Three-wire
200	SFR-SVG4-100/0.4×1	SFR-SVG3-100/0.4×1
250/315	SFR-SVG4-100/0.4×1	SFR-SVG3-100/0.4×1
400	SFR-SVG4-150/0.4×1	SFR-SVG3-200/0.4×1
500/630	SFR-SVG4-200/0.4×1	SFR-SVG3-300/0.4 ×1
800	SFR-SVG4-250/0.4×1	SFR-SVG3-400/0.4 ×1
1000	SFR-SVG4-300/0.4×1	SFR-SVG3-500/0.4×1
1250	SFR-SVG4-400/0.4×1	SFR-SVG3-300/0.4 ×2
1600	SFR-SVG4-250/0.4×2	SFR-SVG3-400/0.4 ×2
2000	SFR-SVG4-300/0.4×2	SFR-SVG3-500/0.4 ×2
2500	SFR-SVG4-400/0.4	SFR-SVG3-400/0.4 ×3
Scope of Application	Business center, office building, hotel, hospital, data center, theater and other occasions with relatively much single-phase load.	Chemical, metallurgy, communication, textile, papermaking, printing, tobacco, automobile, port and other occasions with relatively much three-phase load.

Note: Types M,B and G can be selected according to field situation.

Technical Parameter

Item		Parameter	
SFR-APF	Grid	400V 3P3W/3P4W	690V 3P3W
	Mounting Type	Cabinet	Cabinet
System	Rated Input	400V LL ±15%	690V LL ±15%
	Power Grid Frequency	50/60Hz ±5%	
	Parallel Operation	8 modules, customizable	
	Overall Efficiency	≥97%(laboratory data)	
	Circuit Topology	3-level	
Performance Indicators	Rated Capacity	Up to 400A	Up to 500A
	Loss Of Active Power	<3% rated module power	
	Over-load Capability	120%	
	Mean Time Between Failures	≥100,000 hours	
	Reaction Time	<100μs	
	Response Time	5ms	
	Scope Of Reactive Adjustment	Continuously adjustable from rated induced to rated capacitive	
	Control Algorithm	Compensation algorithm of screening vector of frequency domain possessing self-adaptation capability	
	Switching Frequency	20kHz	
	Cooling Mode	Forced air cooling	
	Noise Level	≤65dB	
Communications and Monitoring	Communications Port	RS485	
	Communications Protocol	Modbus-RTU	
	Module Display Interface	7in/10in LCD touch screen(optional)	
	Monitoring Alarm	Available	
	Monitoring	Independent monitoring and centralized monitoring	
Mechanical Properties	Net Weight	150kg-400kg	230kg-600kg
	Dimensions (W*D*H mm³)	800×800×2200	800×800×2200
		1000×800×2200	1000×800×2200
Environment Requirements		1000×1000×2200	1500×800×2200
	Altitude	1,000m, for every increased 100m, the power is reduced by 1%.	
	Operating Temperature	-20°C-45°C	
	Relative Humidity	5% to 95%,non-condensing	
Related Standards	Protection Class	IP20(customizable)	
	Directive	2014/30/EU 2014/35/EU	
	Standards Compliance	EN 61000-6-2:2005+AC:2005 EN 61000-6-4:2007+A1:2011 EN 50178:1997	