

Static Var Generator

- Durable
- Wear resistant
- Multiple specifications



Model description

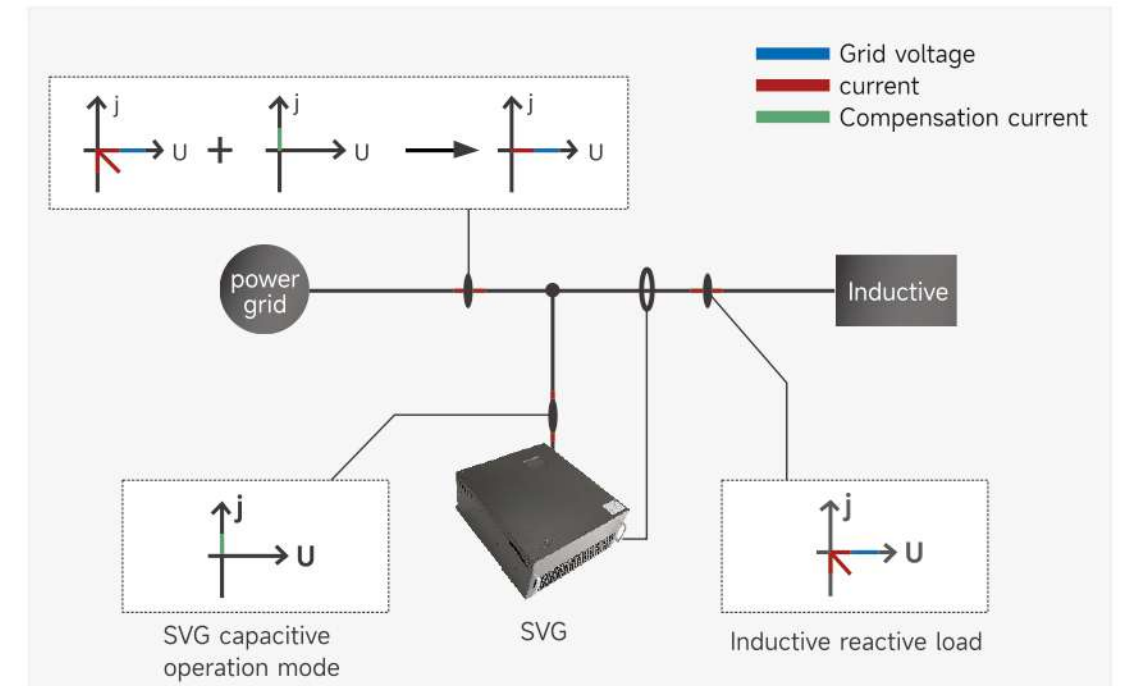
STD	SVG	-	0.4	-	50k	/	4L	-	W
Enterprise code	Static var generator	Voltage level	Rated Capacity (kvar)	2L: Single-phase 3L: Three-phase three-wire 4L: Three-phase four-wire	5/15/35/50 /75/100kvar		W: Wall-mounted R: Rack mount C: Cabinet		
		0.22: 220V 0.4: 400V 0.5: 500V 0.69: 690V							

Product instruction

The working principle of the STD SVG series static var generator is to connect a voltage-type inverter in parallel to the power grid through a filter. By adjusting the amplitude and phase of the AC side output voltage of the inverter, it can dynamically control the reactive power in the power grid system for accurate compensation, the instantaneous response time is less than 50us, and the full response time is less than 10ms, avoiding overcompensation and undercompensation. It is currently the best solution in the field of reactive power compensation.



- <50us**
The instantaneous response time
- <10ms**
the full response time



Features

- Use DSP+CPLD all digital control core, three-level topology technology, advanced reactive power detection algorithm and PWM control strategy to achieve dynamic and accurate compensation of reactive power.
- Adopt modular design, which facilitates parallel connection of multiple modules, takes small space and is easy to maintain.
- The structural design of independent air ducts and independent warehouses ensures the stable operation of the equipment.
- Carry out full-range dynamic compensation for inductive reactive power and capacitive reactive power, and solve the three-phase unbalance problem at the same time.
- The dynamic response speed to the load is at the millisecond level, which can achieve dynamic and accurate compensation for the reactive power of impact loads.

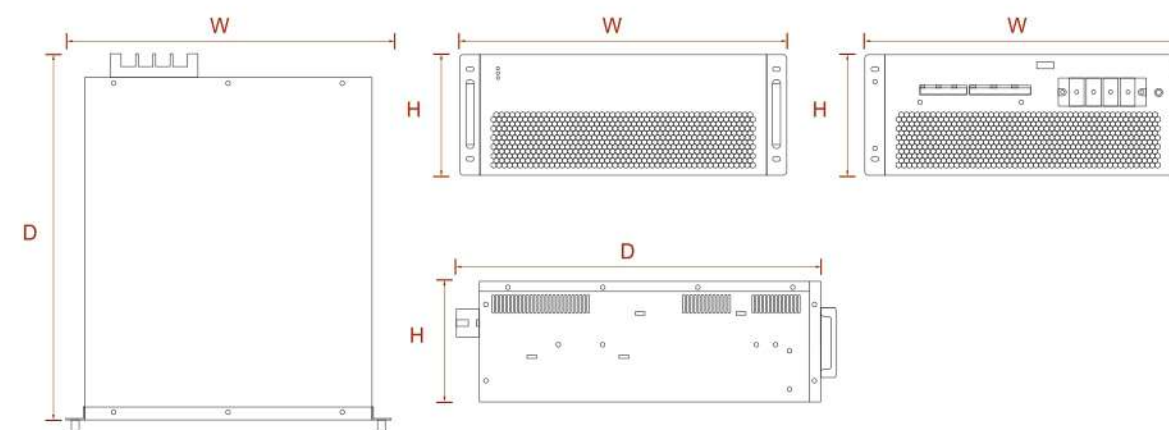
Applications

Residential power distribution system, drainage and sewage treatment industry, distributed photovoltaic industry, chemical industry, chemical fiber and petroleum industry, metallurgy, foundry and cement industry, coal and mining industry, automobile manufacturing industry, etc.

Technical Parameters

	220V series	380V series	500V series	690V series
Altitude	<2000m, above 2000m, derate according to GB/T3859.2			
ambient temperature	-20 ~ +50°C			
Relative humidity	≤90%, no condensation on the surface when the monthly minimum temperature is 25°C			
pollution level	Level III below			
Operating Voltage	AC220V±20%	AC380V±20%	AC500V±20%	AC690V±20%
working frequency	50Hz±5%			
Rated compensation capacity	5kvar	15/35/50/75/100kvar	90kvar	120kvar
Grid structure	L/N	3P3W/3P4W		
Number of units connected in parallel	Unlimited			
Overall machine efficiency	≥97%			
On-off frequency	32kHz	16kHz	12.8kHz	12.8kHz
Function selection	Reactive power	Reactive power、Reactive power+imbalance		
Reactive power compensation rate	≥99%	>95%		
full response time	<10ms			
noise	≤60dB	≤60dB	≤65dB	≤65dB
control method	2-way RS485 interface (supports GPRS/WIFI)			
Protection	Overload, software/hardware overcurrent, grid overvoltage and undervoltage, power failure, overtemperature, frequency abnormality protection, etc.	Overload, software/hardware overcurrent, grid overvoltage and undervoltage, grid voltage imbalance, power failure, overtemperature, frequency abnormality, short circuit protection, etc.		
Installation method	Rack/wall-mounted		Rack	
Incoming line	Back incoming (rack type) 、upper incoming (wall-mounted)		Back incoming line	
Protection level	IP20			

Model& Specification



Models				
Model Number	Compensation capacity (kvar)	System voltage (V)	Dimensions (D*W*H)	Cooling method
STD SVG-0.22-5k/2L-R	5	220	220*330*160mm	Forced air cooling
STD SVG-0.4-15k/4L-R	15	400	460*490*89mm	
STD SVG-0.4-35k/4L-R	35	400	460*490*89mm	
STD SVG-0.4-50k/4L-R	50	400	500*510*190mm	
STD SVG-0.4-75k/4L-R	75	400	500*550*240mm	
STD SVG-0.4-100k/4L-R	100	400	500*550*240mm	
STD SVG-0.5-90k/4L-R	90	500	495*675*275mm	
STD SVG-0.69-120k/4L-R	120	690	495*675*275mm	

Cabinet device model				
Model Number	Compensation capacity (kvar)	System voltage (V)	Dimensions (D*W*H)	Cooling method
STD SVG-0.4-200k/4L-C	200	400	1000*1000*2200mm	Forced air cooling
STD SVG-0.4-250k/4L-C	250	400	1000*1000*2200mm	
STD SVG-0.4-300k/4L-C	300	400	1000*1000*2200mm	
STD SVG-0.4-400k/4L-C	400	400	1000*1000*2200mm	
STD SVG-0.5-270k/4L-C	270	500	1000*1000*2200mm	
STD SVG-0.69-360k/4L-C	360	690	1000*1000*2200mm	

Active Power Filter

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 Durable
- 
 Wear resistant
- 
 Multiple specifications



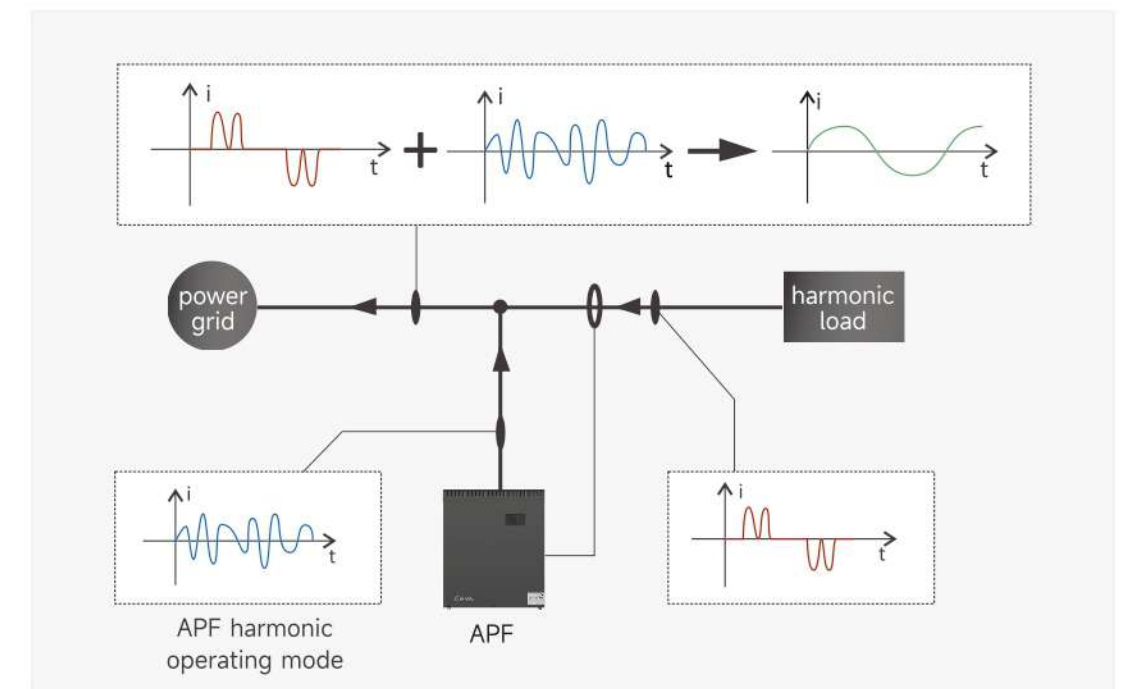
Model description

STD APF - 0.4 - 50A / 4L - W

Enterprise code	Active Power Filter	Voltage level 0.22: 220V 0.4: 400V 0.5: 500V 0.69: 690V	Rated Capacity (kvar) 25/50/75 /100/150A	2L: Single-phase 3L: Three-phase three-wire 4L: Three-phase four-wire	W: Wall-mounted R: Rack mount C: Cabinet
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Working principle

The working principle of the STD APF series active power filter is to detect the load current in real time, separate the harmonic currents one by one based on the specified harmonic current detection algorithm, and generate control signals according to the set filtering percentage to drive the IGBT output and the load harmonic current amplitude, compensation currents with the same value and opposite phase achieve the purpose of harmonic cancellation.



Features

- ❑ Use DSP+CPLD all digital control core, three-level topology technology, advanced harmonic detection algorithm and PWM control strategy to achieve accurate compensation of harmonic current.
- ❑ Adopt modular design, which facilitates parallel connection of multiple modules, takes up little space and is easy to maintain.
- ❑ The structural design of independent air ducts and independent warehouses ensures the stable operation of the equipment.
- ❑ It can filter harmonics in a wide range of harmonics, from 2 to 50 harmonics, and solve the problem of three-phase unbalance at the same time.
- ❑ The harmonic filtering rate is high. If the capacity allows, the harmonic current filtering rate can be as high as 95%.
- ❑ Set 100% current limiting output to ensure long-term stable operation of the equipment.

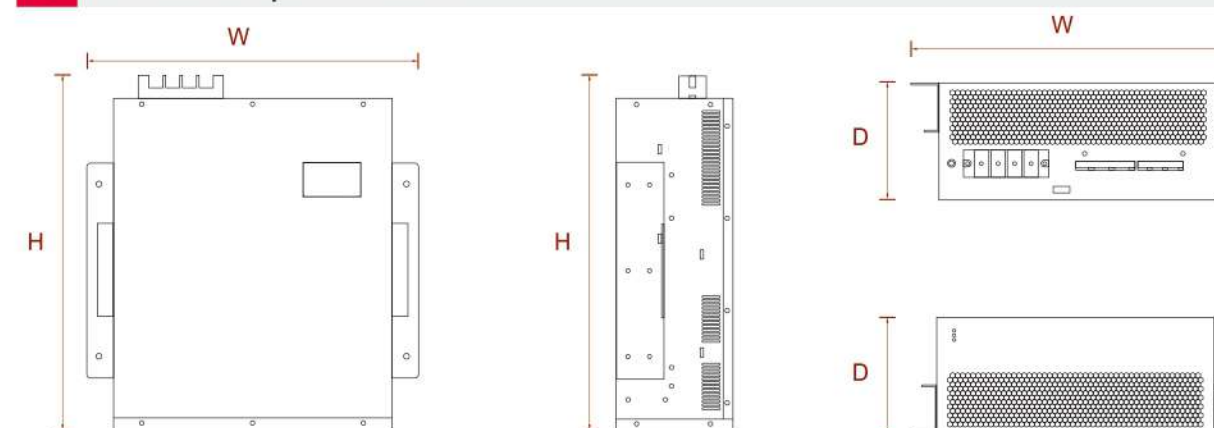
▶ Applications

Data centers, hospitals, petrochemical industry, pharmaceutical manufacturing, steel industry, semiconductor manufacturing, light industry and textile industry, etc.

▶ Technical Parameters

	220V series	380V series	500V series	690V series
Altitude	<2000m, above 2000m, derate according to GB/T3859.2			
ambient temperature	-20 ~ +50°C			
Relative humidity	≤90%, no condensation on the surface when the monthly minimum temperature is 25°C			
pollution level	Level III below			
Operating Voltage	AC220V±20%	AC380V±20%	AC500V±20%	AC690V±20%
working frequency	50Hz±5%			
Compensation current	25A	25/50/75/100/150A	100A	100A
Grid structure	L/N	3P3W/3P4W	3P3W/3P4W	3P3W/3P4W
Number of units connected in parallel	Unlimited			
Overall machine efficiency	≥97%			
Grid structure	32kHz	16kHz	12.8kHz	12.8kHz
Compensation range	2 ~ 50times, single compensation rate is adjustable			
Function selection	Reactive power	Reactive power, reactive power + asymmetry		
Reactive power compensation rate	≥95%	≥92%		
Neutral filtering capability	Neutral line filtering capability is 3 times that of phase filtering capability			
full response time	<10ms	<40ms	<40ms	<40ms
noise	≤60dB	≤60dB	≤65dB	≤65dB
control method	2-way RS485 interface (supports GPRS/WIFI)			
Protection	Overload, software/hardware overcurrent, grid overvoltage and undervoltage, power failure, overtemperature, frequency abnormality protection, etc.	Overload, software/hardware overcurrent, grid overvoltage and undervoltage, grid voltage imbalance, power failure, overtemperature, frequency abnormality, short circuit protection, etc.		
Installation method	Rack/wall-mounted		Rack	
Incoming line	Back incoming (rack type) 、upper incoming (wall-mounted)		Back incoming line	
Protection level	IP20			

▶ Model& Specification



Models				
Model Number	Rated Current(A)	System voltage (V)	Dimensions (D*W*H)	Cooling method
STD APF-0.22-25A/2L-R	25	220	220*330*160mm	Forced air cooling
STD APF-0.4-25A/4L-R	25	400	460*490*89mm	
STD APF-0.4-50A/4L-R	50	400	460*490*89mm	
STD APF-0.4-75A/4L-R	75	400	500*510*190mm	
STD APF-0.4-100A/4L-R	100	400	500*550*240mm	
STD APF-0.4-150A/4L-R	150	400	500*550*240mm	
STD APF-0.5-100A/4L-R	100	500	495*675*275mm	
STD APF-0.69-100A/4L-R	100	690	495*675*275mm	

Cabinet device model				
Model Number	Compensation capacity (kvar)	System voltage (V)	Dimensions (D*W*H)	Cooling method
STD APF-0.4-100A/4L-C	100	400	1000*1000*2200mm	Forced air cooling
STD APF-0.4-150A/4L-C	150	400	1000*1000*2200mm	
STD APF-0.4-200A/4L-C	200	400	1000*1000*2200mm	
STD APF-0.4-250A/4L-C	250	400	1000*1000*2200mm	
STD APF-0.4-300A/4L-C	300	400	1000*1000*2200mm	
STD APF-0.4-400A/4L-C	400	400	1000*1000*2200mm	
STD APF-0.5-300A/4L-C	300	500	1000*1000*2200mm	
STD APF-0.69-300A/4L-C	300	690	1000*1000*2200mm	