

Active Harmonic Filter

SFR-APF



Various application



Excellent filtering performance



Excellent protection for equipment and system



User-friendly HMI

Rack-mounted

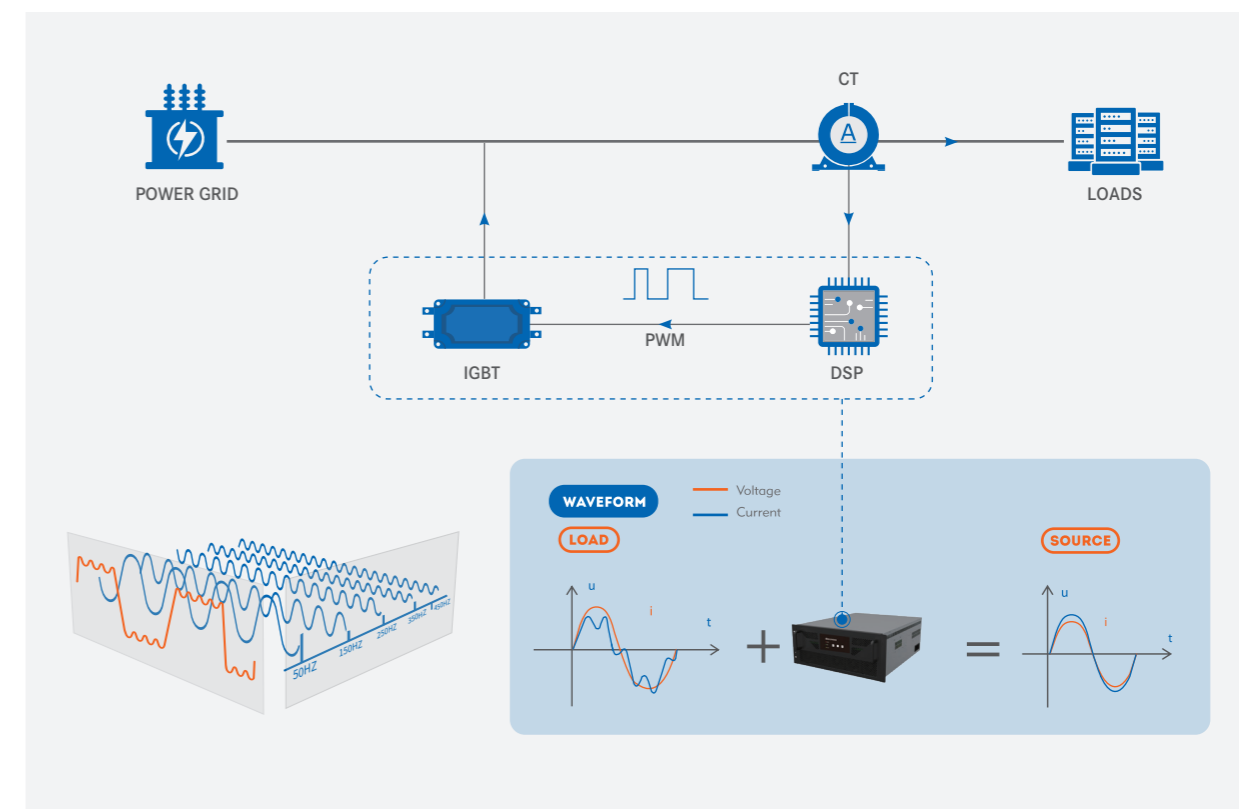
Wall-mounted



SFR-APF active harmonic filter is a new type of power quality improvement production for dynamically filtering harmonics and compensating reactive power. It can filtering and compensate harmonic (variable in orders and frequency) and dynamic reactive power in real time. It is used to overcome the shortcomings of conventional harmonic suppression and reactive power compensation methods such as passive harmonic filters, and achieve the harmonic filtering function and reactive power compensation function of the system. SFR-APF active harmonic filter is widely used in power, metallurgy, petroleum, port, chemical industry and industrial and mining enterprises.

Overview

The increase in power energy productivity has improved the standard of living, and most of the electrical loads used in the intelligent power consumption are nonlinear nowadays. Harmonic current is generated by these nonlinear loads, and is formed by the superposition of countless sinusoidal currents whose frequencies are integer multiples of the fundamental current. When all the waveforms are superimposed, they will become distorted waveform.



Model Description

SFR-APF

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100

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0.4

B

Annotation:

- ① Model of the manufacturer
- ② Wiring mode:
3-Three-phase three-wire
4-Three-phase four-wire
- ③ Compensation capacity(A):
15A/30A/50A/75A/100A/125A/150A
- ④ Voltage level(kV)
- ⑤ Installation mode:
M-Rack-mounted type, B-Wall-mounted type

Technical Parameter

Item		Parameter			
SFR-APF	Grid	208V, 400V 3P3W/3P4W*		690V 3P3W	
	Mounting Type	Wall-mounted	Rack-mounted	Floor model	
System	Rated Input	208V, 400V ±10%		690V ±10%	
	Power Grid Frequency	50/60Hz ±5%			
	Parallel Operation	8 modules, customizable			
	Overall Efficiency	≥97%(laboratory data)			
	Circuit Topology	3-level			
	Performance Indicators	Rated Capacity	15-150A		100A/ 125A/150A
Compensation Mode		Harmonic, reactive power, unbalance			
Filtering Range		2 to 51 orders			
Filtering Order		Selectable from 2 to 51			
Filtering Degree		Adjustable from 2 to 51			
Reaction Time		<100μs			
Response Time		<5ms			
Target Power Factor		Adjustable from -1 to +1			
Control Algorithm		FFT, Intelligent FFT and instantaneous reactive power			
Switching Frequency		20kHz			
Cooling Mode		Forced air cooling			
Noise Level		≤65dB			
Communications & Display		Communications Port	RS485		
		Communications Protocol	Modbus-RTU		
		Module Display Interface	4.3in LCD	LED indicator	LED indicator
	Protection Function	Automatic current limit protection for power grid over-voltage and under-voltage,power grid over-frequency and under-frequency,inverted sequence of input voltage, over-current,over-heating and over-load, and busbar short-circuit.			
	Monitoring Alarm	Available			
	Monitoring	Independent monitoring and centralized monitoring			
Ambient Standards	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			
	Protection Class	IP20			
Related Standards	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 IEEE519			

* : Please check other voltage levels, such as 480V, in the specifications of user manual.

Dimensions

