



Active Harmonic Compensation Filter

Rongzhi Electric Power is a large-scale Active Harmonic Compensation Filter manufacturer and supplier in China. We have been specialized in High voltage equipment for many years. Our products have a good price advantage and cover most of the South America, Middle East, Africa, Southeast Asia markets. We look forward to becoming your long-term partner in China.

Rongzhi Active Harmonic Compensation Filter Basic principle

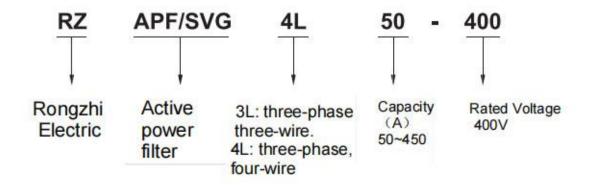
Active power filter (APF) is a new type of power harmonic control special equipment made of modern power electronics technology and digital signal processing technology based on high speed DSP devices. It consists of two main parts: command current operation circuit and compensation current generation circuit. The command current operation circuit monitors the current in the line in real time, converts the analog current signal into digital signal, and sends the signal to the high-speed digital signal processor (DSP) for processing, separates the harmonic wave from the fundamental wave, and sends the driving pulse to the compensation current generating circuit in the form of PWM signal to drive the IGBT or IPM power module. A compensating current with the same amplitude and opposite polarity as the harmonic current in the power grid is generated and injected into the power grid to compensate or cancel the harmonic current and actively eliminate the power harmonic.



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Rongzhi Active Harmonic Compensation Filter Model Instruction



Rongzhi Active Harmonic Compensation Filter Parameter (Specification)

Size	400V
	50A-450A
Rated input line voltage	380V(-40%~+20%)
Power frequency	50/60Hz(Range45Hz~62Hz)
Number of Parallelable	unlimited
overall efficiency	≥97%
Power network structure	Three phase three wire four phase four wire
Current transformer	150/5~10000/5
circuit topology	Three level
performance index	

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harmonic compensation	support
reactive compensation	support
unbalance compensation	support
harmonic range	>97%
fast response time	<100us
total reponse time	<10ms
Target power factor	Capacitive sensibility is continuously adjustable
Switch frequency	10kHz
Cooling Type	Intelligent air cooling
noise label	<65dB
communication interface	RS485, CAN, network interface
communication agreement	General electric protocol. Modbus protocol
Module dis la interface	LCD multi-function touch color screen
Protection function	Protection of overvoltage .short circuit, inverter reverse and over compensation
Fault Alarm	Yes
Environmental requirement	
Altitude	≤ 1500mm,Beween 1500 and 4000m, according to GB/T3859- 2, every 100m increase, the power is reduced by 1%





Operating temperaturel	-10℃~+40℃
Relative humidity	5%~95%, without condensation
Protection Grade	Other IP levels can be customized

Rongzhi Active Harmonic Compensation Filter advantage

- 1.The SPA4 series is the perfect solution for harmonic control
- 2. Dynamic current compensation eliminates harmonics and improves power factor
- 3. Reduce the heating of harmonics in cables, switches and transformers
- 4. Reduce power failure and time caused by harmonics
- 5.Improve power utilization and reduce operating costs