

### 3 Phase Active Harmonic Filter Banks



Rongzhi Electric Power is a large-scale 3 Phase Active Harmonic Filter Banks 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.

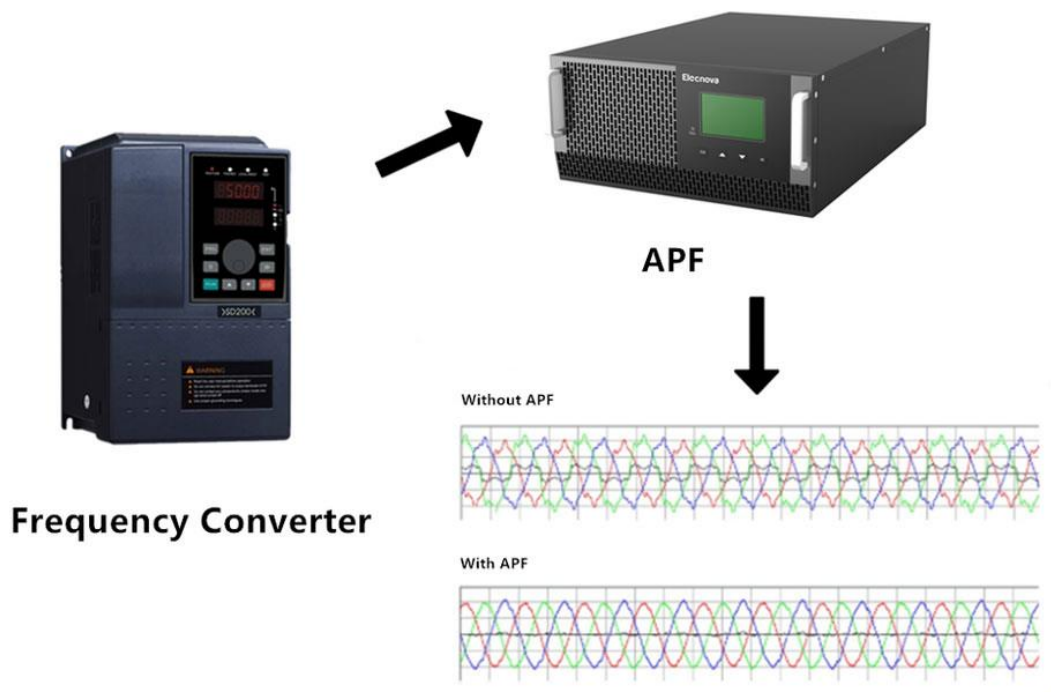
## Rongzhi 3 Phase Active Harmonic Filter Banks Product introduction

APF mainly uses FFT algorithm, DFT algorithm and three-phase circuit instantaneous reactive power theory algorithm. There are two kinds of APF, parallel type and series type, the former is used more; Shunt active power filter mainly deals with current harmonics and series active power filter mainly deals with voltage harmonics.

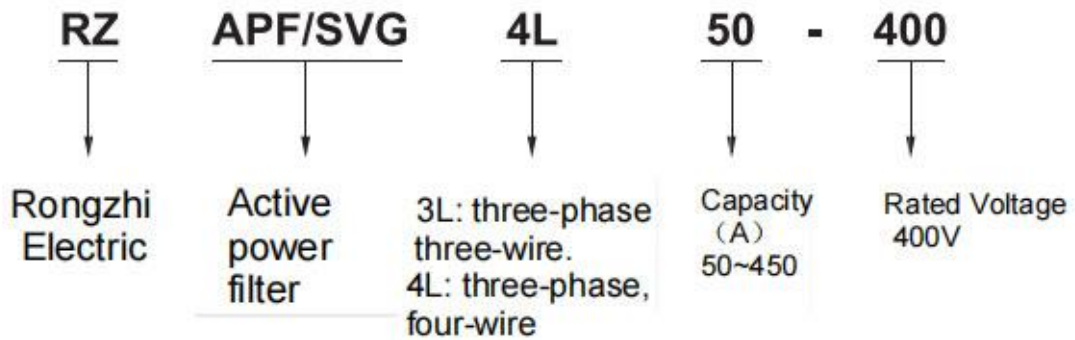


## Rongzhi 3 Phase Active Harmonic Filter Banks Theoretical basis

Active filter compared with passive filter, good governance effect, mainly can filter out many times and high harmonics at the same time, will not cause resonance, but the price is relatively high! The practical application of safety factor is very low, the international common practice is to transformer boost, to ensure reliability, the relevant national departments also require the form of transformer boost and active filter combination, control high voltage harmonics!



## Rongzhi 3 Phase Active Harmonic Filter Banks Model Instruction



## Rongzhi 3 Phase Active Harmonic Filter Banks 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 display 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,Between 1500 and 4000m, according to GB/T3859-2, every 100m increase, the power is reduced by 1%

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

## Rongzhi 3 Phase Active Harmonic Filter Banks Feature And Application



### Chemical Industry

Dust removal fan, gas blower, Roots fan, desulfurization fan, gas compressor (nitrogen, carbon dioxide, ammonia, etc.), circulating water pump, etc



#### Other

Pharmaceutical paper industry fan, water pump, etc. Sugar industry feeder, press, etc. rubber industry mixer and so on.



#### Electricity

Induced draft fan, blower, primary fan, secondary fan, feed water pump, circulating water pump, condensate pump, mortar pump, etc.



#### Mine

Main and auxiliary shaft hoist, main fan, pressure fan, extraction fan, air Compressor, gas drainage pump, medium pump, drainage pump, belt machine, roller Press, etc.

## Rongzhi 3 Phase Active Harmonic Filter Banks

### Performance specification

1. Dynamic active filter, comprehensively improve power quality;
2. DSP full digital control, 20KHz switching frequency, quick response to dynamic load changes;
3. The number of harmonic compensation can be selected, the maximum can filter out 50 harmonics;
4. Suttons active power filter can optionally compensate reactive power at the same time;
5. With three-phase unbalance compensation ability;
6. With automatic current limiting function, no overload occurs;
7. High efficiency, full load loss less than 2.57;
8. Parallel installation mode, simple installation, small volume;
9. Reduce line loss, eliminate transformer and motor heating caused by harmonics, and realize significant energy saving of the system;
10. The filtering effect of active power filter is not affected by the change of system impedance, and can automatically suppress the system resonance;
11. Select partial compensation, partial compensation or total compensation according to the distribution structure. CT can be located on the power side or the load side;
12. Easy to expand and redundancy design, up to 10 parallel operation.

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