

## Active Load Balancer ALB

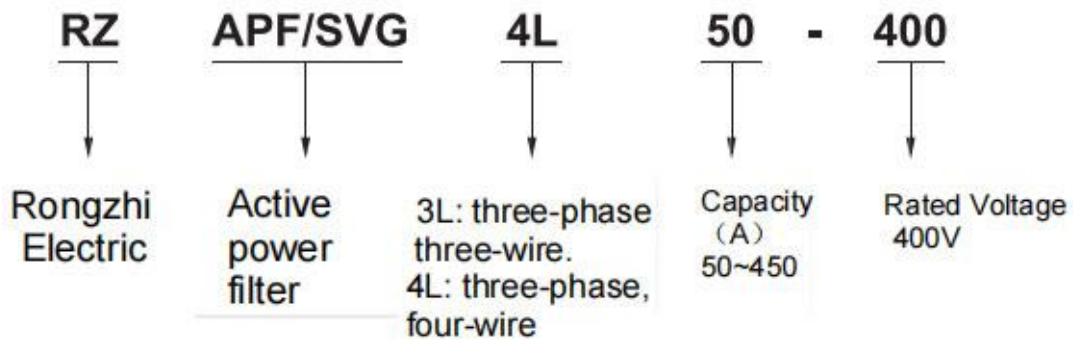


Rongzhi Electric Power is a large-scale Active Load Balancer ALB manufacturer and supplier in China. We have been specialized in High voltage equipment for many years. Our products have a good price advantage and cover most of the South America, Middle East, Africa, Southeast Asia markets. We look forward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

## Rongzhi Active Load Balancer ALB Introduction

Active power filter (APF: Active power filter (Active power filter) is a new type of power electronic device used for dynamic suppression of harmonics and compensation of reactive power. It can quickly track and compensate harmonics of different sizes and frequencies. The reason why it is called active is that compared with passive LC filter, it can only passively absorb harmonics of fixed frequency and size. APF can control and actively output the size, frequency and phase of current by sampling load current and separating each harmonic and reactive power, and quickly respond to offset the corresponding current in the load, realizing dynamic tracking compensation, and can complement both harmonic and reactive power and unbalance.

## Rongzhi Active Load Balancer ALB Model Instruction



SVG Operating Mode	Waveform and Vector	Remark
No Load Mode	<p style="text-align: center;">SVG Outputs on Current (a) <math>U_1 = U_2</math></p>	$UI = U_s \cdot I_{svg} = 0$ , SVG outputs no reactive current.
Capacitive Mode	<p style="text-align: center;">Leading Current (b) <math>U_1 &gt; U_2</math></p>	$UI > U_s \cdot I_{svg}$ is leading the voltage, and its amplitude is continuously adjustable.
Inductive Mode	<p style="text-align: center;">Lagging Current (c) <math>U_1 &lt; U_2</math></p>	$UI < U_s \cdot I_{svg}$ is lagging the voltage, and its amplitude is continuously adjustable.

## Rongzhi Active Load Balancer ALB 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	
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,Between 1500 and 4000m, according to GB/T3859-2, every 100m increase, the power is reduced by 1%
Operating temperaturel	-10°C~+40°C
Relative humidity	5%~95%, without condensation
Protection Grade	Other IP levels can be customized

## Rongzhi Active Load Balancer ALB Scope of application

- 1.SPA3 is suitable for industrial load situations
- 3.SPA4 series active power filter

## Rongzhi Active Load Balancer ALB Performance description

1. Effectively eliminate neutral current caused by zero sequence harmonics
2. It can filter all or selected harmonics in the range of 2 ~ 25 times at the same time
3. Single-phase dynamic compensation, not affected by system imbalance
4. Parallel installation mode, simple installation, convenient, easy to expand, up to 4 parallel
5. Simple design and selection, no need to carry out detailed analysis of the power grid, only need to measure the size of harmonic current
6. Light volume, wall-hanging installation
7. Standard communication interface, convenient access to the user's existing communication system