

AC Power Supply ANFS(F) Series



Product Introduction

The ANFS(F) series AC power supply adopts FPGA digital control, instantaneous waveform control and high-frequency pulse width modulation (SPWM) technologies. It has the advantages of fast response speed, high output accuracy, and superior waveform quality; it can withstand 3 times the rated current impact, a variety of output modes, which can achieve "one machine with multiple functions" to meet the needs of customers for flexible use; it adopts 8-inch color LCD with exquisite and high-grade appearance, and digital keys make the operation more convenient. Mainly used in applications such as home appliances, motors and production lines. It is one solution that meets the basic needs of traditional industries and a power supply alternative for equipment upgrades. It also provides laboratories, quality inspection units, scientific research institutes and other applications more flexible power configuration scheme.

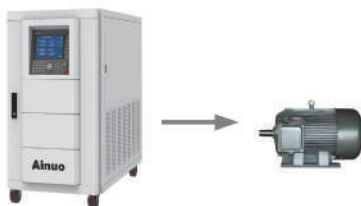
Features

- Adopt FPGA digital technology, realize accuracy control and high quality sine wave output;
- Advanced power output mode management: standard three-phase output, separated three-phase output (three-phase voltage and frequency adjusted independently), parallel single-phase output (three phase parallel, single-phase output) to achieve multi-function;
- Operating in over current shock (up to 3 times of rated current) within 2s, start the impact load of 1/3 capacity of power supply directly;

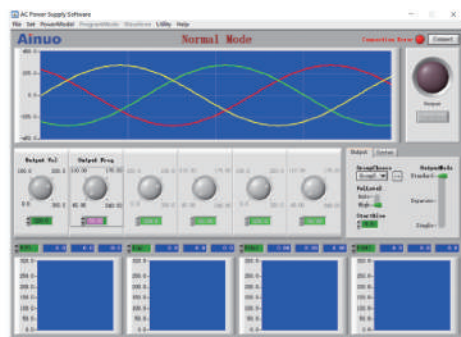
- Adjustable voltage and frequency during output status, frequency change without transit time;
- Measurement: voltage, current, current peak, frequency, active power, apparent power, power factor, voltage peak factor;
- Online monitoring: monitor IGBT temperature, transformer temperature, fan speed, input voltage and other parameters during output status;
- Operating data recorders: keep the record of power supply status and alarm code automatically during alarming, save the maintenance time;
- Fan speed will be adjustable automatically with the temperature of power supply to reduce the noise;
- Lock key, user-friendly design, automatically locking without operation for 5 minutes to prevent from operation mistakes;
- 8-inch large-screen color LCD display, digital key operation;
- Standard RS232, optional RS485, GPIB, Ethernet, analog control and other remote communication/control.

Applications

- Over shock capacity: impact load of 1/3 capacity of power supply directly without soft start.



PC control software



Output mode management

(standard three-phase output, separated three-phase output, parallel single-phase output)



Large-size color LCD, digital key input, knob operation



Three-phase unbalanced output
(amplitude unbalance + Angle unbalance)

Specifications

Model		ANFS015A(F)	ANFS030A(F)	ANFS045A(F)	ANFS060A(F)	ANFS090A(F)	ANFS120A(F)	ANFS180A(F)	ANFS240A(F)	
Capacity		15kVA	30kVA	45kVA	60kVA	90kVA	120kVA	180kVA	240kVA	
Input	Voltage, Frequency	3-phase 4-wire + PE, Phase voltage: 220V±33V, line voltage: 380V±57V, 50/60Hz±3Hz								
Output	Mode	3 phase standard mode, 3 phase independent mode, parallel single phase mode, 3 phase unbalanced mode								
	Voltage	Phase voltage: 0.0 ~ 300.0V, Automatic state: (low-grade) 0.0 ~ 150.0V, (high-grade) 150.1~300V; high-grade lock:0.0 ~ 300.0V								
	Frequency	40.00 ~240.00 Hz								
	3 phase standard mode rated current	110V	45.4A	90.9A	136.3A	181.8A	272.7A	363.6A	545.4A	727.2A
		220V	22.7A	45.4A	68.2A	90.9A	136.3A	181.8A	272.7A	363.6A
	3 phase independent mode rated current	110V	45.4A	90.9A	136.3A	181.8A	272.7A	363.6A	545.4A	727.2A
		220V	22.7A	45.4A	68.2A	90.9A	136.3A	181.8A	272.7A	363.6A
	parallel single phase mode rated current	110V	136.3A	272.7A	409.1A	545.4A	818.2A	1090.9A	1636.4A	2181.8A
		220V	68.2A	136.3A	204.5A	272.7A	409.1A	545.4A	818.2A	1090.9A
	Setting accuracy	Voltage	Resolution: 0.1V, accuracy: 0.2%×reading value+0.2%×full scale value							
		Frequency	Resolution: 0.01Hz, accuracy: 0.05%							
	Testing accuracy	Voltage	Resolution: 0.1V, accuracy: 0.2%×reading value+0.2%×full scale value							
		Frequency	Resolution: 0.01Hz, accuracy: 0.05%							
		Current	Resolution: 0.1A/1A, accuracy: 0.3%×reading value +0.3%×full scale value							
		Power	Resolution: 0.1kW/0.01kW/0.001kW, accuracy: 0.45%×reading value+0.45%×full scale value							
	Frequency stability	≤0.02%								
	Voltage distortion	Linear load: THD < 1%								
	Transient recovery time	20ms								
	Three phase phase difference	Three phase standard mode: 120°±2°; Three-phase unbalanced mode: 0.0°~359.9°, 0.1° adjustable								
	Crest factor	1.41±0.1								
	Source voltage effect	≤1%								
Load effect	≤1%									
Overload capacity	105% < outputs≤110% the output will be stopped within 15s; 110% < outputs200% the output will be stopped within 5s; 200% < outputs300% the output will be stopped within 2s; 300% < output the output will be stopped immediately									
Protection mode	IGBT overheat, IGBT over current, Transformer overheat, Input under voltage, Input over voltage, Output under voltage, Output over voltage, Output over load, Output short circuit, output over current									
Function	Display mode/Start	8 inch LCD display, resolution: 800*600, Soft-start time:0.0 ~ 99.9s								
	Online adjustment function	In the normal mode, the output voltage and frequency can be adjusted online								
	Memory function	Power down memory function, memory last output mode and parameters; shortcut group:10 groups								
	Line voltage crop compensation	0.000 ~ 0.500Ω								
	Communication	Standard: RS232; Optional: RS485, GPIB, Ethernet, Analog control port								
Environment	Temperature and humidity	0 ~ 40℃; 20 ~ 90%RH								
Dimensions (W×H×D mm)		600×1130×1018			700×1330×1218			800×1768×1418		
Weight(Kg)		280	330	470	590	780	1030	1320	1490	

Any changes to the above parameter specifications will not be notified separately.

Specifications

Model		ANFS350A(F)	ANFS450A(F)	ANFS550A(F)	ANFS650A(F)	
Capacity		350kVA	450kVA	550kVA	650kVA	
Input	Voltage , Frequency	3-phase 4-wire + PE, Phase voltage: 220V±33V, line voltage: 380V±57V, 50/60Hz±3Hz				
Output	Mode	3 phase standard mode , 3 phase independent mode, 3 phase unbalanced mode				
	Voltage	Automatic state: (low-grade) 0.0 ~ 150.0V, (high-grade) 150.1~300V; high-grade lock:0.0 ~ 300.0V				
	Frequency	40.00 ~240.00 Hz				
	3 phase standard mode rated current	110V	1060A	1363A	1666A	1970A
		220V	530.3A	681.8A	833.3A	984.8A
	3 phase independent mode rated current	110V	1060A	1363A	1666A	1970A
		220V	530.3A	681.8A	833.3A	984.8A
	Setting	Voltage	Resolution: 0.1V, accuracy: 0.2%×reading value +0.2%×full scale value			
	accuracy	Frequency	Resolution: 0.01Hz, accuracy: 0.05%			
	Testing accuracy	Voltage	Resolution: 0.1V, accuracy: 0.2%×reading value +0.2%×full scale value			
		Frequency	Resolution: 0.01Hz, accuracy: 0.05%			
		Current	Resolution: 0.1A/1A, accuracy: 0.3%×reading value +0.3%×full scale value			
		Power	Resolution: 0.1kW/0.01kW/0.001kW, accuracy: 0.45%×reading value +0.45%×full scale value			
	Frequency stability	≤0.02%				
	Voltage distortion	Linear load: THD < 1%				
	Transient recovery time	20ms				
	Three phase phase difference	Three phase standard mode: 120°±2°; Three-phase unbalanced mode: 0.0°~359.9°, 0.1° adjustable				
Crest factor	1.41±0.1					
Source voltage effect	≤1%					
Load effect	≤1%					
Overload capacity	105% < outputs≤110% the output will be stopped within 15s; 110% < outputs≤200% the output will be stopped within 5s; 200% < outputs≤300% the output will be stopped within 2s; 300% < output the output will be stopped immediately					
Protection mode	IGBT overheat, IGBT over current, Transformer overheat, Input under voltage、Input over voltage、Output under voltage、Output over voltage、Output over load、Output short circuit、output over current					
Function	Display mode;Start	8 inch LCD display, resolution: 800*600; Soft-start time:0.0 ~ 99.9s				
	Online adjustment function	In the normal mode, the output voltage and frequency can be adjusted online				
	Memory function	Power down memory function, memory last output mode and parameters; shortcut group:10 groups				
	Line voltage crop compensation	0.000 ~ 0.500Ω				
	Communication	Standard: RS232; Optional: RS485、GPIB、Ethernet、Analog control port				
Environment	Temperature and humidity	0 ~ 40℃; 20 ~ 90%RH				
Dimensions (W×H×D mm)		1800×2000×1400	2400×2000×1400	3000 (1400+1600) ×1900×1400		
Weight (Kg)		2730	3150	4270	4660	

Any changes to the above parameter specifications will not be notified separately.