

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.

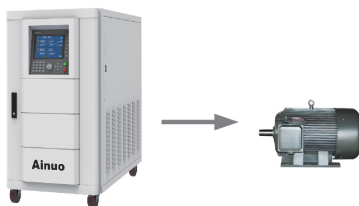
Features

- 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;

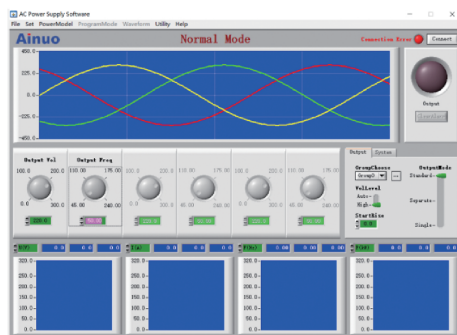
- Adjustable voltage and frequency during output status, frequency change without transit time;
- Measurement: voltage, current, current peak, frequency, active power, apparent power, power factor, voltage peak factor;
- Online monitoring: monitor IGBT temperature, transformer temperature, fan speed, 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.

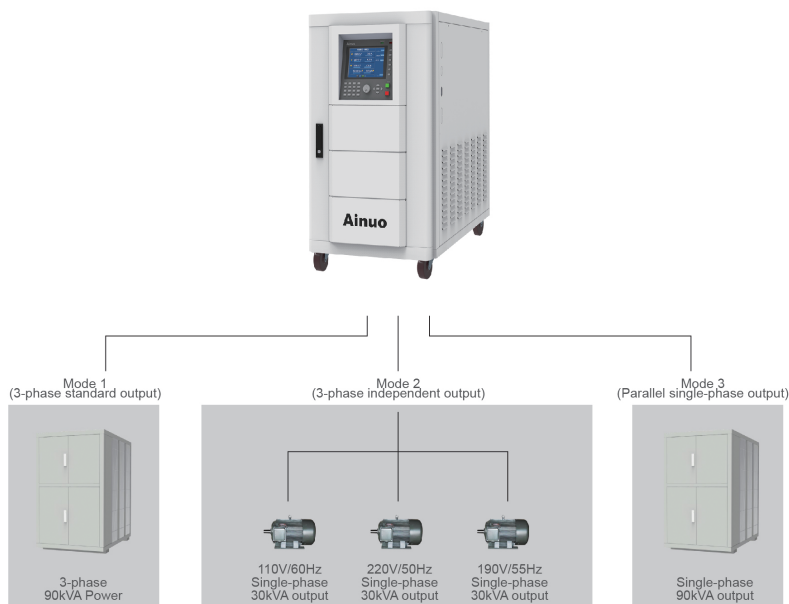


PC control software

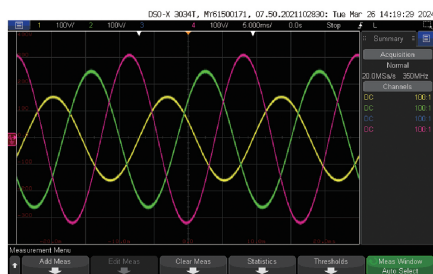


Output mode management

(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							
	Mode	3 phase standard mode, 3 phase independent mode, parallel single phase mode, 3 phase unbalanced mode							
Output	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
		220V	22.7A	45.4A	68.2A	90.9A	136.3A	181.8A	272.7A
	3 phase independent mode rated current	110V	45.4A	90.9A	136.3A	181.8A	272.7A	363.6A	545.4A
		220V	22.7A	45.4A	68.2A	90.9A	136.3A	181.8A	272.7A
	parallel single phase mode rated current	110V	136.3A	272.7A	409.1A	545.4A	818.2A	1090.9A	1636.4A
		220V	68.2A	136.3A	204.5A	272.7A	409.1A	545.4A	818.2A
	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%						
Function	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						
	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	Voltage	Resolution: 0.1V, accuracy: 0.2%×reading value +0.2%×full scale value						
			Frequency	Resolution: 0.01Hz, accuracy: 0.05%					
		accuracy	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% < outputs110% 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)		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.