

AC Power Supply ANFC(F) Series



Product Introduction

The ANFC(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, high capacity and strong load adaptability; adopts modular design concept, small volume and weight, convenient operation and high cost performance. 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.

Features

- Adopt FPGA digital technology, realize accuracy control and high quality sine wave output;
- 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;
- Three-phase loading separately, start single phase output by U/V/W fast settings; (Only suitable for three-phase output power supply) ;
- Measurement: voltage, current, frequency, active power;
- 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;
- Voltage range: 1.0-150.0V or 150.1-300.0 V automatic adjustment, or locked at 1.0-300.0V;
- Shortcuts groups, power-off memory, shortcuts key and knobs operation;
- Fan speed will be adjustable automatically with the temperature of power supply to reduce the noise;

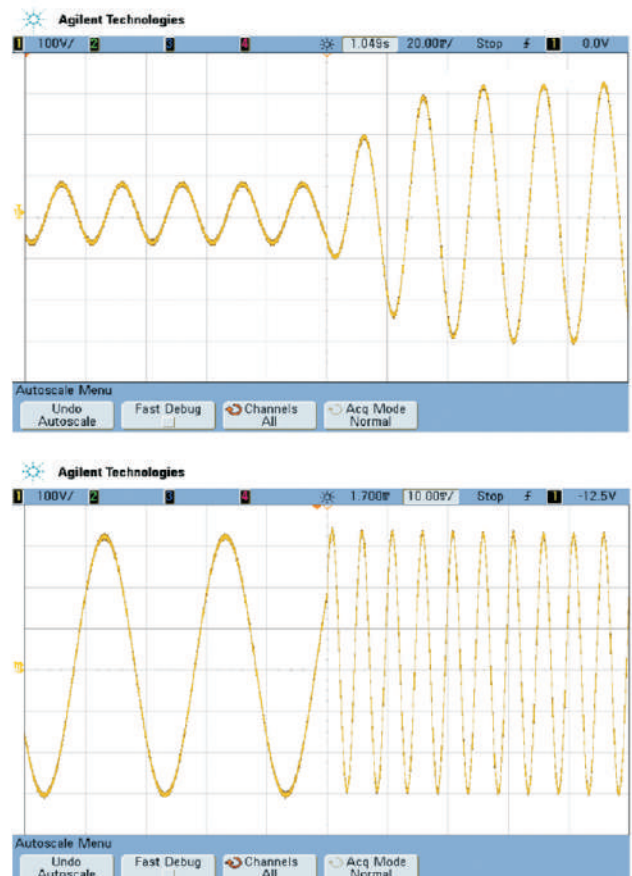
- Lock key, user-friendly design, automatically locking without operation for 5 minutes to prevent from operation mistakes;
- Standard RS232, optional RS485, GPIB, Ethernet, analog control and other remote communication/control.

Applications

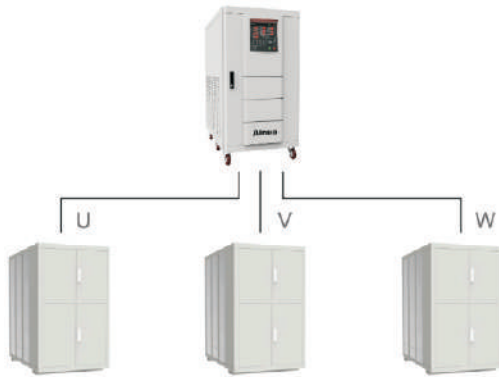
- Over shock capacity: impact load of 1/3 capacity of power supply directly without soft start.



- Adjustable voltage and frequency during output

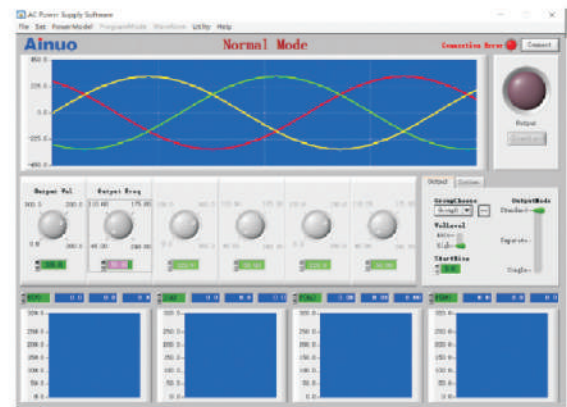


Three-phase loading separately(Only suitable for three-phase output power supply)



Single-phase Load Single-phase Load Single-phase Load

PC control software



Specifications

Model		ANFC015S(F)	ANFC020S(F)	ANFC030S(F)	ANFC045S(F)	ANFC060S(F)	ANFC090S(F)	ANFC120S(F)
Capacity		15kVA	20kVA	30kVA	45kVA	60kVA	90kVA	120kVA
Input	Voltage, Frequency							
	3-phase 4-wires + PE, Phase voltage: 220V±33V, line voltage: 380V±57V, 50/60Hz±3Hz							
	Voltage							
	single-phase 2-wires, Automatic files: (low grade) 1 ~ 150.0V, (high-grade) 150.1~300V; high-grade lock:1.0 ~ 300.0V							
	Frequency							
	45.0 ~ 65.0Hz, 100Hz, 120Hz, 200Hz, 240Hz							
	Rated current	110V	136.3A	181.8A	272.7A	409.1A	545.4A	818.2A
		220V	68.2A	90.9A	136.3A	204.5A	272.7A	409.1A
	Setting accuracy	Voltage	Resolution: 0.1V; accuracy: 0.2%×reading value +0.2%×full scale value					
		Frequency	Resolution: 0.1Hz; accuracy: 0.05%					
Output	Testing accuracy	Voltage	Resolution: 0.1V; accuracy: 0.2%×reading value +0.2%×full scale value					
		Frequency	Resolution: 0.1Hz; 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					
	Crest factor		1.41±0.1					
	Source voltage effect		≤1%					
	Load effect		≤1%					
Function	Overload capacity		105%<output≤110% the output will be stopped within 15s; 110%<output≤200% the output will be stopped within 5s; 200%<output≤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					
	Online adjustment function		The output voltage and frequency (45~65Hz) can be adjusted online under status					
	Memory function		Power down memory function, memory last output mode and parameters; Shortcut group 7 groups					
	Line voltage drop compensation		0.000~0.500Ω					
Environment	Communication control interface		Standard: RS232; Optional: RS485, GPIB, Ethernet, Analog control port					
	Temperature and humidity		0~40℃; 20~90%RH					
	Dimension W×H×D(mm)		600×1130×1018			700×1330×1218		800×1768×1418
Weight (Kg)		175	190	250	370	500	560	970

Specifications

Model		ANFC015T(F)	ANFC030T(F)	ANFC045T(F)	ANFC060T(F)	ANFC090T(F)	ANFC120T(F)	ANFC180T(F)	ANFC240T(F)	
Capacity		15kVA	30kVA	45kVA	60kVA	90kVA	120kVA	180kVA	240kVA	
Input	Voltage, Frequency	3-phase 4-wires + PE, Phase voltage: 220V±33V, line voltage: 380V±57V, 50/60Hz±3Hz								
Output	Voltage	Three -phase 4-wires, Automatic files: (low grade) 1.0 ~ 150.0V, (high-grade) 150.1~300V; high-grade lock:1.0~300.0V								
	Frequency		45.0 ~ 65.0Hz, 100Hz、120Hz、200Hz、240Hz							
	Rated	110V	45.4A	90.9A	136.3A	181.8A	272.7A	363.6A	545.4A	727.2A
	current	220V	22.7A	45.4A	68.2A	90.9A	136.3A	181.8A	272.7A	363.6A
	Setting	Voltage	Resolution: 0.1V, accuracy: 0.2%×reading value +0.2%×full scale value							
	accuracy	Frequency	Resolution: 0.1Hz, accuracy: 0.05%							
	Testing	Voltage	Resolution: 0.1V, accuracy: 0.2%×reading value +0.2%×full scale value							
		Frequency	Resolution: 0.1Hz, 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							
	3 phase phase difference		120°±2°							
	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	Online adjustment function	The output voltage and frequency (45~65Hz) can be adjusted online under status								
	Memory function	Power down memory function, memory last output mode and parameters; Shortcut group 7 groups								
	Line voltage drop compensation	0.000 ~ 0.500Ω								
	Communication control interface	Standard: RS232; Optional: RS485、GPIB、Ethernet、Analog control port								
Environment	Temperature and humidity	0 ~ 40℃; 20 ~ 90%RH								
Dimension W×H×D(mm)		600×1130×1018		700×1330×1218			800×1768×1418			
Weight (Kg)		260	300	430	540	730	970	1240	1390	

Specifications

Model		ANFC350T(F)	ANFC450T(F)	ANFC550T(F)	ANFC650T(F)	ANFC1000T(F)	ANFC1500T(F)	ANFC2000T(F)	
Capacity		350kVA	450kVA	550kVA	650kVA	1000kVA	1500kVA	2000kVA	
Input	Voltage, Frequency	3-phase 4-wires + PE, Phase voltage: 220V±33V, line voltage: 380V±57V, 50/60Hz±3Hz							
Output	Voltage	Three -phase 4-wires, Automatic files: (low-grade) 1.0 ~ 150.0V, (high-grade) 150.1~300V; high-grade lock:1.0 ~ 300.0V				Three -phase 4-wires, Automatic files: (low-grade) 10 ~ 150.0V, (high-grade) 150.1~300.0V; high-grade lock:10 ~ 300.0V			
	Frequency		45.0 ~ 65.0Hz, 100Hz, 120Hz, 200Hz, 240Hz				45.0 ~ 65.0Hz		
	Rated current	110V	1060A	1363A	1666A	1970A	3030A	4545A	6060A
		220V	530.3A	681.8A	833.3A	984.8A	1515A	2272A	3030A
	Setting accuracy	Voltage	Resolution: 0.1V, accuracy: 0.2%×reading value +0.2%×full scale value				Resolution:0.1V, accuracy:0.4%×reading value +0.4%×full scale value		
		Frequency	Resolution: 0.1Hz, accuracy: 0.05%						
	Testing accuracy	Voltage	Resolution: 0.1V, accuracy: 0.2%×reading value +0.2%×full scale value				Resolution: 0.1V, accuracy:0.4%×reading value +0.4%×full scale value		
		Frequency	Resolution: 0.1Hz, accuracy: 0.05%						
		Current	Resolution: 0.1A/1A, accuracy: 0.3%×reading value +0.3%×full scale value				Resolution: 0.1A/1A, accuracy:0.6%×reading value +0.6%×full scale value		
		Power	Resolution: 0.1kW/0.01kW/0.001kW, accuracy: 0.45%×reading value +0.45%×full scale value				Resolution: 0.1kW/0.01kW/0.001kW, accuracy:0.9%×reading value +0.9%×full scale value		
	Frequency stability		≤0.02%						
	Voltage distortion		Linear load: THD < 3%						
	Transient recovery time		20ms						
	3 phase phase difference		120°±2°						
	Crest factor		1.41±0.1						
	Source voltage effect		≤1%						
	Load effect		≤1%						
Overload capacity		105% < output≤110% the output will be stopped within 15s ; 110% < output≤200% the output will be stopped within 5s; 200% < output≤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	Online adjustment function	The output voltage and frequency (45~65Hz) can be adjusted online under status							
	Memory function	Power down memory function, memory last output mode and parameters; Shortcut group 7 groups							
	Line voltage drop compensation	0.000 ~ 0.500Ω							
	Communication control interface	Standard: RS232; Optional: RS485、 GPIB、 Ethernet							
	Remote control	Analog control port (optional)							
Environment	Temperature and humidity	0 ~ 40℃;20 ~ 90%RH							
Dimension W×H×D(mm)		1800×2000 ×1400	2400×2000 ×1400	4800 (1200×4) ×2000×1200		-	-	-	
Weight (Kg)		2730	3150	4270	4660	-	-	-	