

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;

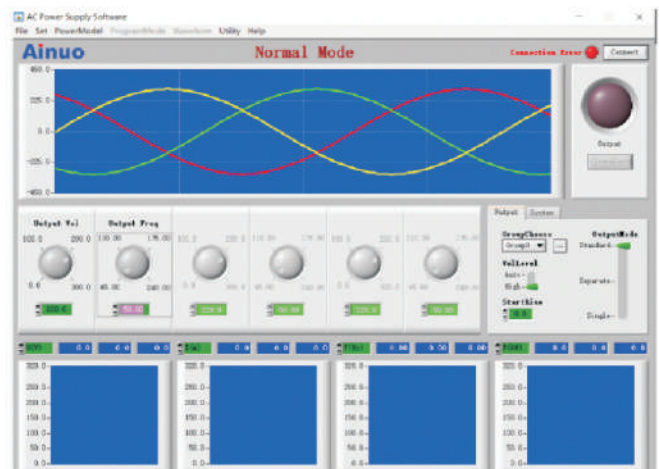
- Adjustable voltage and frequency during output status, frequency change without transit time;
- Measurement: voltage, current, current peak, frequency, active power, apparent power, power factor, voltage peak factor;
- Online monitoring: monitor IGBT temperature, transformer temperature, fan speed,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



| Normal — Run | | | | | |
|--|--------|---------|--------------|--------|---------|
| U | 200.0V | 0.2 kW | PF :1.000 | 200.0V | U Para. |
| | 1.0A | 0.2 kVA | CF :1.414 | | |
| | | | Ipeak: 1.4 A | | |
| V | 200.0V | 0.2 kW | PF :1.000 | 200.0V | V Para. |
| | 1.0A | 0.2 kVA | CF :1.414 | | |
| | | | Ipeak: 1.4 A | | |
| W | 200.0V | 0.2 kW | PF :1.000 | 200.0V | W Para. |
| | 1.0A | 0.2 kVA | CF :1.414 | | |
| | | | Ipeak: 1.4 A | | |
| | 50.0Hz | | Uuv :346.4 V | 50.0Hz | Freq |
| | 0.6kW | | Uvw :346.4 V | | |
| | | | Uwu :346.4 V | | |
| <div> <div>STOP</div> <div>Stop</div> </div> | | | | | |
| <div> <div>Complex</div> <div>Simple</div> <div>Display</div> </div> | | | | | |

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-wires + 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 | | | | | | | | |
| | Voltage | Phase voltage: 0.0 ~ 300.0V, Automatic files: (low-grade) 0.0 ~ 150.0V, (high-grade) 150.1~300V; high-grade lock:0.0 ~ 300.0V | | | | | | | | |
| | Frequency | 45.00 ~ 240.00Hz | | | | | | | | |
| | 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° | | | | | | | |
| | 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 | | | | | | | | |
| Dimension W×H×D(mm) | | 600×1130×1018 | | | 700×1330×1218 | | | 800×1768×1418 | | |
| Weight(Kg) | | 280 | 330 | 470 | 590 | 780 | 1030 | 1320 | 1490 | |

Specifications

| Model | | | ANFS350A(F) | ANFS450A(F) | ANFS550A(F) | ANFS650A(F) |
|---------------------|--|-----------|---|----------------|--------------------------|-------------|
| Capacity | | | 350kVA | 450kVA | 550kVA | 650kVA |
| Input | Voltage, Frequency | | 3-phase 4-wires + PE, Phase voltage: 220V±33V, line voltage: 380V±57V, 50/60Hz±3Hz | | | |
| Output | Mode | | 3 phase standard mode, 3 phase independent mode | | | |
| | Voltage | | Automatic files: (low-grade) 0.0 ~ 150.0V, (high-grade) 150.1~300V; high-grade lock:0.0 ~ 300.0V | | | |
| | Frequency | | 45.00 ~ 240.00Hz | | | |
| | 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 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 < 3% | | | |
| | Transient recovery time | | 20ms | | | |
| | Three phase phase difference | | Three phase standard mode: 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 | 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 | | | |
| Dimension W×H×D(mm) | | | 1800×2000×1400 | 2400×2000×1400 | 4800 (1200×4) ×2000×1200 | |
| Weight (Kg) | | | 2730 | 3150 | 4270 | 4660 |