

AC Power Supply

Single-phase Output Frequency Conversion AC Power Supply TFC-S Series

► Product description:

TFC-S series is single-phase AC variable frequency power supply can simulate the voltage of power grids in various countries around the world, providing customers with high-purity and high-reliability sine wave power output and is professionally used in home appliances, small appliances, motors, certification agencies, medical equipment, lighting and other fields to meet the requirements of product design and development, production line testing, quality assurance testing, aging life testing, voltage and frequency conversion and other testing requirements.



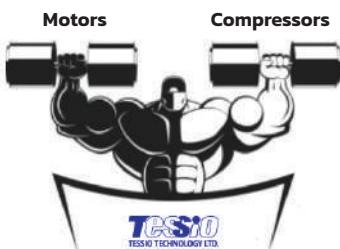
Features

- Product design, the use of modular design and digital control technology, high stability, high precision, fast response, man-machine interface and operation in line with industry habits.
- Strong carrying capacity to meet the aging needs of home appliance production line.
- The use of accurate anti-impact technology, can withstand the load of large current impact, 3 times the rated current can mature 2s, especially suitable for motor, motor and other impact equipment.
- With soft start function, and soft start time can be set, suitable for motors, motors and other equipment frequent starting occasions, can be set according to the working condition, soft start time, reduce the impact current.
- The dynamic response speed is fast, and the voltage mutation reaction time is within 20ms.
- The output voltage and frequency can be adjusted under the starting state, and the use is flexible.
- 8-inch color touch screen, all operations can be achieved through the touch screen, exquisite appearance, convenient operation, and equipped with digital keys, function keys, knobs, etc., diversified operation.
- With Auto-Lock function, timed to automatically lock the keyboard to prevent miscontact.
- Voltage range design: 0.0 ~ 150.0V, 150.1 ~ 300.0V or 0.0 ~ 300.0V, high grade and low grade can be full power output; Frequency output range 45.00 ~ 65.00Hz, resolution 0.01Hz.
- The measurement function is complete, can measure voltage, current, current peak, frequency, active power, apparent power, power factor, voltage peak factor and other power parameters.
- With the "black box" function, real-time monitoring of internal voltage, current, temperature and other parameters, abnormal conditions immediately alarm and automatically record operating parameters, convenient for later viewing and maintenance.
- Communication interface standard RS232, optional RS485, GPIB, ETHERNET, analog control, etc.

💡 Type Recommendation

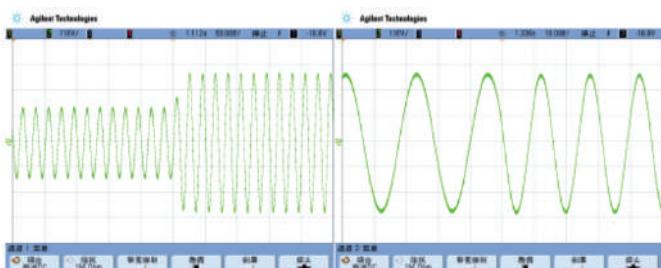
♦ Overload capability makes it easier to start motors, compressors and other equipment

TFC-S series adopts precise current control technology, which can withstand the impact of 3 times the rated current for 2 s, and easily cope with 5-10 times the impact current at the start of the load such as motors and compressors.



♦ Online frequency regulation, with digital keys, one step in place, seamless switching, accurate and fast.

TFC-S series uses digital synthetic DDS, which allows voltage-frequency values to be set via digital keys. Voltage & Frequency respond instantaneously without transition, making the test accurate and efficient.



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◆ 8 inch color touch screen, operation experience upgrade

TFC-S series 8 "color touch screen, all operations can be done by touch screen, intuitive, friendly and efficient.



◆ Black box function, real-time monitoring, improved maintenance efficiency

TFC-S series built-in "black box" function enables real-time monitoring of power operation data and timely recording of input and output parameters in case of abnormal operation, making maintenance easier.



Specifications

Model	TFC-015S	TFC-030S	TFC-045S	TFC-060S	TFC-090S	TFC-120S	TFC-150S	TFC-180S	TFC-240S						
Output Capacity	15kVA	30kVA	45kVA	60kVA	90kVA	120kVA	150kVA	180kVA	240kVA						
Basic Function															
Output function	Simulate power grid voltage from all over the world														
Isolated function	Built-in Isolated transformer														
Wire Method	Input Terminal : Three-phase, 4 wires + PE				/ Output : Single-phase 2 wire + PE										
Output Parameter															
Output Mode	Single-phase Standard Sine Wave, 2 wires + PE														
Output	Automatic	Low range : 0.0 ~ 150.0V (L-N) / High range : 150.1 ~ 300.0V (L-N)													
Voltage	High-end Lock	0.0 ~ 300.0V (L-N)													
Rate	110V (Low grade)	136.3A	272.7A	409.1A	545.4A	818.2A	1090.9A	1363.6A	1636.4A	2181.8A					
Current	220V (High grade)	68.2A	136.3A	204.5A	272.7A	409.1A	545.4A	681.8A	818.2A	1090.9A					
Voltage Setting Accuracy	≤0.4%FS, Resolution : 0.01Hz														
Output Frequency	45.00 ~ 65.00Hz, Resolution 0.01														
Frequency Setting Accuracy	Accuracy : 0.02%														
Frequency Stability	≤ 0.02%														
Voltage Distortion (THD)	<1% (linear load)														
Response Time	≤ 2mS														
Voltage response Time	≤ 20mS														
Crest Factor	1.14 ± 0.1														
Source Voltage Effect	≤1%														
Loading Effect	≤1%														
Effciency	>85%														
Measurement Display															
Display Mode	8 inch color LCD Screen														
Voltage Meas. Accuracy	Accuracy : 0.2%F.S + 0.2% x Reading / Resolution : 0.1V														
Frequency Meas. Accuracy	Accuracy : 0.02%, / Resolution : 0.01Hz														
Current Meas. Accuracy	Accuracy : 0.3%F.S±0.3% x Reading / Resolution: 0.1A/1A														
Power Meas. Accuracy	Accuracy : 0.5%F.S±0.5% x Reading / Resolution: 0.1kW / 0.01kW / 0.001kW														
Operation Function															
Auto Stronge Function	Automatic memory of set parameters, automatic call at start-up														
Soft Start	With soft start function, soft-start time can be set from 0.0 ~ 99.9s														
Adjustment Online Function	In the start state, the output voltage, freq. settings value can be adjusted by the numeric keys, ▲/▼ keys, knob & update imediately														
V-drop compensation Function	Impedance compensation : 0.000 ~ 0.500Ω														
Fast Call	10 shortcut groups in normal mode														
Protection 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 Function	Over-current, Overload, Short-circuit protection, Overheat protection, Output over-voltage, under-volatge														
Software Protection	Phase loss protection, artificial interlligence monitoring (AI-Monitor) function, Black-Box function, Auto-Lock key function														
Remote Interface															
Communication Interace	Standard : RS-232 / Optional : RS-485, GPIB, Ethernet														
Remote Interface	Optional : Analog control interface														
Input Parameter															
Input Voltage Range	Three-phase 4 wires + PE, 380V±57V (L-L)														
Input Freqnecy Range	45 ~ 65Hz														
Working Environment															
Operation Temperature	0 ~ 40°C														
Operation Humidity	20 ~ 90%RH (non-condensation)														
Dimension (WxHxD) mm.	600x1150x1020			700x1350x1220			800x1750x1420								
Weight (kg.)	265	310	440	550	740	980	1250	1270	1400						