

Programmable AC Power Supply TFC6000 / 6000T Series

Introduction

The TFC series are switching AC power supply with single phase output, output capacity from 500VA to 1MVA. The output capacity can be made higher according to customer requests. The TFC series provides different output & input spec. for different needs. Three sets of memories store panel settings, avoiding repeated operations. Four separate LED displays simultaneously show voltage, current, frequency, wattage and power/power factor. Multiple-protection designs protect the TFC series and related loads from unexpected damages. The TFC series are widely used in laboratories, production calibration & test and military applications.

Features

- ✓ Adopts Direct Digital Synthesis (DDS) technology, good waveform, high stability frequency, good continuity
- ✓ Adopts half sine wave current and similar DC component waveform test, high measurement accuracy
- ✓ Embedded intelligent PC control system
- ✓ Full range adjustable output: LOW 0~150V, HIGH 0~300V, step 0.1V
- ✓ Output frequency 45~120Hz (40~500Hz optional), step 0.1Hz
- ✓ Setting output current limit function
- ✓ 3 groups front panel setting save & recall
- ✓ Over voltage, over current, over load, short circuit and current limit protections
- ✓ RMS voltage, current, active power, frequency, power factor readings
- ✓ Regulator response time less than 2ms for 100% load and unload
- ✓ Great overload capability, instantaneous current can withstand 3 times of the rated current
- ✓ With software startup, good for inductive load, such as motor start, transformer

Product photo



Programmable AC Power Supply



Specifications (Single phase)

Model	TFC-6000	TFC-6001	TFC-6003	TFC-6005	TFC-6010	
Power	500VA	1KVA	3KVA	5KVA	10KVA	
Working mode	SPWM					
Input						
Phase	1 ϕ 2W					
Voltage	220V \pm 10%					
Frequency	47Hz - 63Hz					
Output						
Phase	1 ϕ 2W					
Voltage	Low: 0-150VAC / High: 0-300VAC AUTO					
Frequency	45-120Hz (40-500 optional), 0.1Step					
Max. current	L=120V	4.2A	8.4A	25A	42A	84A
	H=240V	2.1A	4.2A	12.5A	21A	42A
LED display	V rms, A rms, Frequency, Wattage, Power factor					
Voltage regulation	0.1%					
Load regulation	1%					
T.H.D	2% (pure resistive load)					
Frequency regulation	0.01%					
Voltage resolution	0.1V					
Frequency resolution	0.1Hz					
Current resolution	0.001A			0.01A		
Measuring accuracy	Voltage	0.5% full scale+5 digits				
	Current	0.5% full scale+5 digits				
	Wattage	0.5% full scale+5 digits				
	Frequency	0.01% full scale+5 digits				
Setting accuracy	Voltage	1% full scale				
	Current	0.1% full scale				
Memory	3 sets: M1 (V_F_A), M2 (V_F_A), M3 (V_F_A)					
Interface	RS-232 (optional)					
Current limit setup	0~Max.current					
Protection	Over current, over load, over temperature and short circuit protections					
Weight (kg)	15	20	30	50	80	
Dimension(mm)	430 \times 178 \times 540		430 \times 222 \times 540	430 \times 445 \times 550	430 \times 667 \times 550	
Working environment	0-40 $^{\circ}$ C 20-80%RH					

Programmable AC Power Supply



Specifications (Single phase)

Model	TFC-6015	TFC-6020	TFC-6030	TFC-6050	TFC-6100	
Power	15KVA	20KVA	30KVA	50KVA	100KVA	
Working mode	SPWM					
Input						
Phase	3 ϕ 4W					
Voltage	380V \pm 10%					
Frequency	47Hz - 63Hz					
Output						
Phase	1 ϕ 2W					
Voltage	Low: 0-150VAC / High: 0-300VAC AUTO					
Frequency	45-120Hz (40-500 optional), 0.1Step					
Max. current	L=120V	125A	168A	250A	420A	840A
	H=240V	62.5A	84A	125A	210A	420A
LED display	V rms, A rms, Frequency, Wattage, Power factor					
Voltage regulation	0.1%					
Load regulation	1%					
T.H.D	2% (pure resistive load)					
Frequency regulation	0.01%					
Voltage resolution	0.1V					
Frequency resolution	0.1Hz					
Current resolution	0.1A					
Measuring accuracy	Voltage	0.5% full scale+5 digits				
	Current	0.5% full scale+5 digits				
	Wattage	0.5% full scale+5 digits				
	Frequency	0.01% full scale+5 digits				
Setting accuracy	Voltage	1% full scale				
	Current	0.1% full scale				
Memory	3 sets: M1 (V_F_A), M2 (V_F_A), M3 (V_F_A)					
Interface	RS-232 (optional)					
Current limit setup	0~Max.current					
Protection	Over current, over load, over temperature and short circuit protections					
Weight (kg)	120	150	250	400	600	
Dimension (mm)	430x667x550		610x930x1050		700x1200x1400	
Working environment	0-40°C 20-80%RH					

Programmable AC Power Supply



Specifications (Three phase)

Model	TFC-6006T	TFC-6009T	TFC-6012T	TFC-6015T	TFC-6020T	
Power	6KVA	9KVA	12KVA	15KVA	20KVA	
Working mode	SPWM					
Input						
Phase	1 ϕ 2W			3 ϕ 4W		
Voltage	220V \pm 10%			380V \pm 10%		
Frequency	47Hz - 63Hz					
Output						
Phase	3 ϕ 4W					
Voltage	Low: 0-150VAC / High: 0-300VAC AUTO					
Frequency	45-120Hz (40-500 optional), 0.1Step					
Max. current	L=120V	16.8A	25A	33A	42A	56A
	H=240V	8.4A	12.5A	17A	21A	28A
LED display	V rms, A rms, Frequency, Wattage, Power factor					
Voltage regulation	0.1%					
Load regulation	1%					
T.H.D	2% (pure resistive load)					
Frequency regulation	0.01%					
Voltage resolution	0.1V					
Frequency resolution	0.1Hz					
Current resolution	0.01A					
Measuring accuracy	Voltage	0.5% full scale+5 digits				
	Current	0.5% full scale+5 digits				
	Wattage	0.5% full scale+5 digits				
	Frequency	0.01% full scale+5 digits				
Setting accuracy	Voltage	1% full scale				
	Current	0.1% full scale				
Memory	3 sets: M1 (V_F_A), M2 (V_F_A), M3 (V_F_A)					
Interface	RS-232 (optional)					
Current limit setup	0~Max.current					
Protection	Over current, over load, over temperature and short circuit protections					
Weight (kg)	75	90	120	150	200	
Dimension (mm)	430x700x700				610x930x1050	
Working environment	0-40°C 20-80%RH					

Programmable AC Power Supply



Specifications (Three phase)

Model	TFC-6030T	TFC-6060T	TFC-6100T	TFC-6150T	TFC-6300T	
Power	30KVA	60KVA	100KVA	150KVA	300KVA	
Working mode	SPWM					
Input						
Phase	3φ4W					
Voltage	380V±10%					
Frequency	47Hz - 63Hz					
Output						
Phase	3φ4W					
Voltage	Low: 0-150VAC / High: 0-300VAC AUTO					
Frequency	45-120Hz (40-500 optional), 0.1Step					
Max. current	L=120V	84A	168A	278A	420A	840A
	H=240V	42A	84A	139A	210A	420A
LED display	V rms, A rms, Frequency, Wattage, Power factor					
Voltage regulation	0.1%					
Load regulation	1%					
T.H.D	2% (pure resistive load)					
Frequency regulation	0.01%					
Voltage resolution	0.1V					
Frequency resolution	0.1Hz					
Current resolution	0.01A					
Measuring accuracy	Voltage	0.5% full scale+5 digits				
	Current	0.5% full scale+5 digits				
	Wattage	0.5% full scale+5 digits				
	Frequency	0.01% full scale+5 digits				
Setting accuracy	Voltage	1% full scale				
	Current	0.1% full scale				
Memory	3 sets: M1 (V_F_A), M2 (V_F_A), M3 (V_F_A)					
Interface	RS-232 (optional)					
Current limit setup	0~Max.current					
Protection	Over current, over load, over temperature and short circuit protections					
Weight (kg)	300	500	900	1200	2000	
Dimension (mm)	610×930×1050	700×1200×1400		900×1580×1610	610×930×1050	
Working environment	0-40°C 20-80%RH					

Remarks:

- ✓ The above model numbers are for reference only. The TFC6000 / 6000T series can be made according to customer requests.
- ✓ Units with other AC outputs may have different dimensions, weight and AC input.

Please contact us for more details.

Programmable AC Power Supply TFC8000 / 8000T Series

Introduction

The TFC series are switching AC power supply with single phase output, output capacity from 500VA to 1MVA. The output capacity can be made higher according to customer requests. The TFC series provides different output & input spec. for different needs. Three sets of memories store panel settings, avoiding repeated operations. Four separate LED displays simultaneously show voltage, current, frequency, wattage and power/power factor. Multiple-protection designs protect the TFC series and related loads from unexpected damages. The TFC series are widely used in laboratories, production calibration & test and military applications.

Features

- ✓ Adopts Direct Digital Synthesis (DDS) technology, good waveform, high stability frequency, good continuity
- ✓ Adopts half sine wave current and similar DC component waveform test, high measurement accuracy
- ✓ Embedded intelligent PC control system
- ✓ Full range adjustable output: 0~150V, 0~300V, step 0.1V
- ✓ Output frequency 45~120Hz (40~500Hz optional), step 0.1Hz
- ✓ Setting output current limit function
- ✓ 9 groups front panel setting save & recall
- ✓ RS-232 interface, GPIB interface (optional)
- ✓ Over voltage, over current, over load, short circuit and current limit protections
- ✓ RMS voltage, current, active power, frequency, power factor readings
- ✓ Regulator response time less than 2ms for 100% load and unload
- ✓ Great overload capability; Instantaneous current can withstand 3 times the rated current
- ✓ Numeric input for voltage, frequency, time and numbers
- ✓ Simultaneous execution for 30 sets of voltage, frequency, rise time, execute time settings, continuous test for 999999 cycles

Product photo



Programmable AC Power Supply



Specifications (Single phase)

Model	TFC-8003		TFC-8005		TFC-8010		TFC-8015	
Power	3KVA		5KVA		10KVA		15KVA	
Working mode	SPWM							
Input								
Phase	1 ϕ 2W				3 ϕ 4W			
Voltage	220V \pm 10%				380V \pm 10%			
Frequency	47Hz - 63Hz							
Output								
Phase	1 ϕ 2W							
Voltage	0-150VAC / 0-300VAC AUTO							
Frequency	45-120Hz (40-500 optional), 0.1Step							
Max. current	L=120V	25A	42A	84A	125A			
	H=240V	12.5A	21A	42A	62.5A			
LED display	V rms, A rms, Frequency, Wattage, Power factor, Peak current							
Voltage regulation	0.1%							
Load regulation	1%							
T.H.D	2% (pure resistive load)							
Frequency regulation	0.01%							
Voltage resolution	0.1V							
Frequency resolution	0.1Hz							
Current resolution	0.01A				0.1A			
Measuring accuracy	Voltage	0.5% full scale+5 digits						
	Current	0.5% full scale+5 digits						
	Wattage	0.5% full scale+5 digits						
	Frequency	0.01% full scale+5 digits						
Setting accuracy	Voltage	1%						
	Current	0.1%						
Memory	9 sets							
Interface	RS-232, GPIB (optional)							
Current limit setup	0~Max.current							
Protection	Over current, over load, over temperature and short circuit protections							
Weight (kg)	30	50	80	120				
Dimension (mm)	430x222x540	430x445x550	430x667x550					
Working environment	0-40°C 20-80%RH							

Programmable AC Power Supply



Specifications (Single phase)

Model	TFC-8020		TFC-8030		TFC-8050		TFC-8100	
Power	20KVA		30KVA		50KVA		100KVA	
Working mode	SPWM							
Input								
Phase	3 ϕ 4W							
Voltage	380V \pm 10%							
Frequency	47Hz - 63Hz							
Output								
Phase	1 ϕ 2W							
Voltage	0-150VAC / 0-300VAC AUTO							
Frequency	45-120Hz (40-500 optional), 0.1Step							
Max. current	L=120V	168A	250A	420A	840A			
	H=240V	84A	125A	210A	420A			
LED display	V rms, A rms, Frequency, Wattage, Power factor, Peak current							
Voltage regulation	0.1%							
Load regulation	1%							
T.H.D	2% (pure resistive load)							
Frequency regulation	0.01%							
Voltage resolution	0.1V							
Frequency resolution	0.1Hz							
Current resolution	0.1A					1A		
Measuring accuracy	Voltage	0.5% full scale+5 digits						
	Current	0.5% full scale+5 digits						
	Wattage	0.5% full scale+5 digits						
	Frequency	0.01% full scale+5 digits						
Setting accuracy	Voltage	1%						
	Current	0.1%						
Memory	9 sets							
Interface	RS-232, GPIB (optional)							
Current limit setup	0~Max.current							
Protection	Over current, over load, over temperature and short circuit protections							
Weight (kg)	150	250	400	600				
Dimension (mm)	430x667x550	610x930x1050			700x1200x1400			
Working environment	0-40°C 20-80%RH							

Programmable AC Power Supply



Specifications (Three phase)

Model	TFC-8006T	TFC-8009T	TFC-8012T	TFC-8015T	TFC-8020T	
Power	6KVA	9KVA	12KVA	15KVA	20KVA	
Working mode	SPWM					
Input						
Phase	1 ϕ 2W			3 ϕ 4W		
Voltage	220V \pm 10%			380V \pm 10%		
Frequency	47Hz - 63Hz					
Output						
Phase	3 ϕ 4W					
Voltage	Low: 0-150VAC / High: 0-300VAC AUTO					
Frequency	45-120Hz (40-500 optional), 0.1Step					
Max. current	L=120V	16.8A	25A	33A	42A	56A
	H=240V	8.4A	12.5A	17A	21A	28A
LED display	V rms, A rms, Frequency, Wattage, Power factor, Peak current					
Voltage regulation	0.1%					
Load regulation	1%					
T.H.D	2% (pure resistive load)					
Frequency regulation	0.01%					
Voltage resolution	0.1V					
Frequency resolution	0.1Hz					
Current resolution	0.01A					
Measuring accuracy	Voltage	0.5% full scale+5 digits				
	Current	0.5% full scale+5 digits				
	Wattage	0.5% full scale+5 digits				
	Frequency	0.01% full scale+5 digits				
Setting accuracy	Voltage	1% full scale				
	Current	0.1% full scale				
Memory	9 sets					
Interface	RS-232, or GPIB (optional)					
Current limit setup	0~Max.current					
Protection	Over current, over load, over temperature and short circuit protections					
Weight (kg)	75	90	120	150	200	
Dimension (mm)	430x700x700				610x930x1050	
Working environment	0-40°C 20-80%RH					

Programmable AC Power Supply



Specifications (Three phase)

Model	TFC-8030T	TFC-8060T	TFC-8100T	TFC-8150T	TFC-8300T	
Power	30KVA	60KVA	100KVA	150KVA	300KVA	
Working mode	SPWM					
Input						
Phase	3 ϕ 4W					
Voltage	380V \pm 10%					
Frequency	47Hz - 63Hz					
Output						
Phase	3 ϕ 4W					
Voltage	Low: 0-150VAC / High: 0-300VAC AUTO					
Frequency	45-120Hz (40-500 optional), 0.1Step					
Max. current	L=120V	84A	168A	278A	420A	840A
	H=240V	42A	84A	139A	210A	420A
LED display	V rms, A rms, Frequency, Wattage, Power factor, Peak current					
Voltage regulation	0.1%					
Load regulation	1%					
T.H.D	2% (pure resistive load)					
Frequency regulation	0.01%					
Voltage resolution	0.1V					
Frequency resolution	0.1Hz					
Current resolution	0.01A					
Measuring accuracy	Voltage	0.5% full scale+5 digits				
	Current	0.5% full scale+5 digits				
	Wattage	0.5% full scale+5 digits				
	Frequency	0.01% full scale+5 digits				
Setting accuracy	Voltage	1% full scale				
	Current	0.1% full scale				
Memory	9 sets					
Interface	RS-232, or GPIB (optional)					
Current limit setup	0~Max.current					
Protection	Over current, over load, over temperature and short circuit protections					
Weight (kg)	300	500	900	1200	2000	
Dimension (mm)	610x930x1050	700x1200x1400		900x1580x16 10	610x930x1050	
Working environment	0-40°C 20-80%RH					

Remarks:

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Please contact us for more details.

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