

AC Power Source in Three Phase Output

Introduction

The TFC63 series are three phase output AC power source, output capacity from 500VA to 800kVA. Adopting PWM high frequency technology & IGBT regulation mode, the TFC63 series features constant frequency and voltage with high accuracy. The input and output are galvanically isolated. The TFC63 series can be used to simulate grids of different countries, widely used in laboratories, production calibration & test and military applications.

Features

- ✓ Output voltage: phase voltage 1~300V, line voltage 1~520V, resolution 0.1V
- ✓ Output frequency: 47-63Hz, optional 100Hz, 200Hz, 400Hz, 45-400Hz
- ✓ Fast output key for 110/220V and 50/60Hz
- ✓ Phase difference: $120^{\circ} \pm 2^{\circ}$
- ✓ High accuracy LED display for voltage, current, frequency, active power, power factor
- ✓ Fast transient response, response time no more than 2ms for 100% load and unload
- ✓ Multiple protections: OVP, OCP, OTP and OLP
- ✓ Optional: RS-232/RS-485 interface for PC remote control on output frequency and voltage
- ✓ Optional: DC0-5V analog input for output control
- ✓ Customized specifications and functions acceptable

Product photo



AC Power Source

Specifications

Circuit mode	IGBT/PWM
Input	TFC-6303 and TFC-6306: 1φ2W, 220V±10% 50/60Hz Other models: 3φ4W, 380V±10% 50/60Hz Optional 1φ2W, 220V±10% 50/60Hz
Output	
Phase	3 phase, Phase difference: 120°±2°
Low range	Phase voltage 1.0V-150.0V, Line voltage 1.0-260.0V
High range	Phase voltage 150.1V-300.0V, Line voltage 260.1-520.0V
Frequency	47-63Hz, optional 100Hz, 200Hz, 400Hz, 45-400Hz Fast output key for 50/60Hz
Voltage accuracy	±1% (110V or 220V ±10%) ±1.5% (other range)
Frequency stability	≤0.1%
Voltage stability	±1%
Harmonic distortion	±2% (resistive load)
Crest factor	1.41±0.10
Line regulation	≤1%
Load regulation	≤1%
Efficiency	≥80% (≥70% for models of 3kVA and below)
Response time	Max. 2ms
Meter & Resolution	
Frequency meter	4 digits LED, resolution 0.1Hz
Voltmeter	4 digits LED, resolution 0.1V
Ammeter	4 digits LED, resolution 0.001A / 0.1A
Power meter	4 digits LED, resolution 0.01W/ 0.1kW
Preset function	Preset output voltage, output frequency and output voltage floating ratio
Fast key function	Fast key for output voltage switch, frequency switch, output voltage floating selection
Alarm function	Audio and visual alarm started once protection device is activated. Error code will be displayed.
Protection	Fuse switch for input and output; Fast-response circuit to detect over voltage, over current, over load, over temperature and short circuit; Output will be shut down in protection mode.
Cooling	Cooling fan
Cabinet protection grade	IP2X
Operation environment	0°C-40°C, ≤90% RH(Non-condensing), Altitude: 1500 feet

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Output specifications (1)

Model		6303	6306	6310	6315	6320	6330	6345
Total output capacity		3KVA	6KVA	10KVA	15KVA	20KVA	30KVA	45KVA
Output capacity/phase		1KVA	2KVA	3.3KVA	5KVA	7KVA	10KVA	15KVA
Max. current	1.0V-150.0V	8.4A	16.8A	28A	42A	58A	84A	126A
	150.1V-300.0V	4.2A	8.4A	14A	21A	29A	42A	63A

Output specifications (2)

Model		6360	63100	63150	6300	63300	63400	63450
Total output capacity		60KVA	100KVA	150KVA	200KVA	300KVA	400KVA	450KVA
Output capacity/phase		20KVA	33KVA	50KVA	67KVA	100KVA	134KVA	150KVA
Max. current	1.0V-150.0V	168A	276A	416A	556A	834A	1112A	1260A
	150.1V-300.0V	84A	138A	208A	278A	417A	556A	630A

Specifications are subject to change without prior notice.