

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 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: 45-65Hz adjustable, fixed 50Hz and 60Hz
- ✓ 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
Output	
Phase	3 phase, Phase difference: $120^{\circ} \pm 2^{\circ}$
Low range	Phase voltage 1.0V-150.0V, Line voltage 1.0-260.0V
High range	Phase voltage 1.0V-300.0V, Line voltage 1.0-520.0V
Frequency	45-65Hz adjustable, fixed 50Hz and 60Hz Fast output key for 50/60Hz
Voltage accuracy	$\pm 1\%$ (110V or 220V $\pm 10\%$) $\pm 1.5\%$ (other range)
Frequency stability	$\leq 0.1\%$
Voltage stability	$\pm 1\%$
Harmonic distortion	$\pm 2\%$ (resistive load)
Crest factor	1.41 ± 0.10
Line regulation	$\leq 1\%$
Load regulation	$\leq 1\%$
Efficiency	$\geq 85\%$
Response time	Max. 2ms
3 phase voltage unbalance	Can be connected to unbalanced load, can be used as single phase
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
Insulation	Transformer insulated
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, $\leq 90\%$ RH(Non-condensing), Altitude: 1500 feet

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Model	Total Capacity	Max.Current		Input	N.W (kg)	G.W. (kg)	Dimension (mm)
		Low range @110V	High range @220V				
TFC-6303	3KVA	9A	4.5A	1P 220Vac	75	90	420W*520H*580D
TFC-6306	6KVA	18A	9A	3P 380Vac	150	175	500W*900H*680D
TFC-6310	10KVA	30A	15A	3P 380Vac	170	200	500W*900H*680D
TFC-6315	15KVA	46A	23A	3P 380Vac	200	240	500W*900H*680D
TFC-6320	20KVA	60A	30A	3P 380Vac	260	300	590W*1100H*800D
TFC-6330	30KVA	90A	45A	3P 380Vac	300	360	590W*1100H*800D
TFC-6345	45KVA	136A	68A	3P 380Vac	420	500	720W*1220H*1080D
TFC-6360	60KVA	180A	90A	3P 380Vac	500	580	720W*1220H*1080D
TFC-6375	75KVA	226A	113A	3P 380Vac	530	610	750W*1300H*1382D
TFC-6390	90KVA	272A	136A	3P 380Vac	650	730	750W*1300H*1382D
TFC-63100	100KVA	303A	151A	3P 380Vac	700	820	750W*1300H*1382D
TFC-63120	120KVA	364A	182A	3P 380Vac	800	900	1380W*1450H*870D
TFC-63150	150KVA	454A	227A	3P 380Vac	1000	1100	1380W*1450H*870D
TFC-63180	180KVA	546A	273A	3P 380Vac	1200	1320	2100W*1650H*1350D
TFC-63200	200KVA	606A	303A	3P 380Vac	1400	1520	2100W*1650H*1350D
TFC-63250	250KVA	757A	378A	3P 380Vac	1500	1620	2100W*1650H*1350D
TFC-63300	300KVA	909A	455A	3P 380Vac	1850	1970	2600W*1800H*1550D
TFC-63450	450KV	1363A	681A	3P 380Vac	2200	2350	2600W*1800H*1550D

More models are available at request.

Specifications are subject to change without prior notice.