

## 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: 47-63Hz, optional 100Hz, 200Hz
- ✓ 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

|                                 |  |
|---------------------------------|--|
| <b>Circuit mode</b>             | IGBT/PWM   |
| <b>Input</b>                    | TFC-6303 and TFC-6306: 1 $\phi$ 2W, 220V $\pm$ 10% 50/60Hz<br>Other models: 3 $\phi$ 4W, 380V $\pm$ 10% 50/60Hz<br>Optional 1 $\phi$ 2W, 220V $\pm$ 10% 50/60Hz                              |
| <b>Output</b>                   |  |
| 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                       | 47-63Hz, optional 100Hz, 200Hz<br>Fast output key for 50/60Hz  |
| Voltage accuracy                | $\pm$ 1% (110V or 220V $\pm$ 10%)<br>$\pm$ 1.5% (other range)  |
| Frequency stability             | $\leq$ 0.1%  |
| Voltage stability               | $\pm$ 1%   |
| Harmonic distortion             | $\pm$ 2% (resistive load)  |
| Crest factor                    | 1.41 $\pm$ 0.10  |
| Line regulation                 | $\leq$ 1%  |
| Load regulation                 | $\leq$ 1%  |
| Efficiency                      | $\geq$ 85%   |
| Response time                   | Max. 2ms   |
| <b>Meter &amp; Resolution</b>   |  |
| 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  |
| <b>Insulation</b>               | Transformer insulated  |
| <b>Preset function</b>          | Preset output voltage, output frequency and output voltage floating ratio  |
| <b>Fast key function</b>        | Fast key for output voltage switch, frequency switch, output voltage floating selection  |
| <b>Alarm function</b>           | Audio and visual alarm started once protection device is activated. Error code will be displayed.  |
| <b>Protection</b>               | Fuse switch for input and output;<br>Fast-response circuit to detect over voltage, over current, over load, over temperature and short circuit; Output will be shut down in protection mode. |
| <b>Cooling</b>                  | Cooling fan  |
| <b>Cabinet protection grade</b> | IP2X   |
| <b>Operation environment</b>    | 0 $^{\circ}$ C-40 $^{\circ}$ C, $\leq$ 90% RH(Non-condensing), Altitude: 1500 feet   |

## AC Power Source

### 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          | Low range (110V)  | 8.4A | 16.8A | 28A    | 42A   | 58A   | 84A   | 126A  |
|                       | High range (220V) | 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          | Low range (110V)  | 168A  | 276A   | 416A   | 556A   | 834A   | 1112A  | 1260A  |
|                       | High range (220V) | 84A   | 138A   | 208A   | 278A   | 417A   | 556A   | 630A   |

Specifications are subject to change without prior notice.