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Overview



Programmable AC+DC Bidirectional Grid Simulator & AC/DC Load



**DC Power Supply
Unidirectional & Bidirectional**



AC Power Supply



Programmable DC Electronic Load



Programmable AC+DC Bidirectional Grid Simulator

Programmable AC+DC Bidirectional Grid Simulator

MCB Power-MASTER M Programmable AC/DC Power Supply & AC/DC Load



Features

- Compact modular design, **15KVA** in 4U
- Single unit: maximum **15kW**, **450V L-N**, **30A/ph**, **DC-1kHz** output.
- **Bi-directional** design.
- Various modes: **Regenerative AC/DC source**,
- **Regenerative AC/DC load**, BiPolar DC source
- Regenerative RLC load in full frequency range
- Up to 100th harmonics **waveform generation**, inter-harmonic generation.
- **Grid simulation**, **battery simulation**, **PV simulation**

Programmable AC+DC Bidirectional Grid Simulator

MCB Power-MASTER LS Programmable AC+DC Power Supply



Features

- Output power: up to more than 4MVA and above
- 4 quadrant operation, **regenerative up to 100%** of rated output power back to grid.
- **Regenerative AC load function.**
- Soft start: effectively restrain the impulse current when power on Voltage drop simulation (LVRT test).
- **Extend to DC output .**
- AC output **frequency** extended to **550Hz**

Programmable AC+DC Bidirectional Grid Simulator

MCB Power-MASTER HS Programmable AC+DC Bidirectional Grid Simulator



Features

- Modular design, output power from **15kVA to 1080kVA**.
- **Bi-directional AC/DC** power source, seamless transition between source and sink modes.
- Independent three-phase output, which can be configured as **single-phase output**.
- Output: AC, DC, AC+DC.
- Max output 450V L-N within output frequency range from **DC to 5kHz**.
- Frequency Range: DC~ 5kHz max.
- Up to 100th **harmonic waveform generation, inter-harmonic generation**.

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DC Power Supply

DC Power Supply

MCB POWER-SPIN

Single-phase input, Unidirectional

Low-Power Programmable DC Power Supply [0.6kW, 0.9kW, 1.5kW, 1.8kW]



Features

- Output voltage : 0~3000V
- Output current : 0~120A
- Unidirectional
- Auto-Ranging
- Small size: **1U/half 19 inch** or full 19 inch;
- Equipped with **battery charging function**.

DC Power Supply

MCB POWER-SPIN

Single-phase input, Unidirectional

Low-Power Programmable DC Power Supply
[2 kW - 6.5 kW]



Features

- Output voltage: 10V **up to 1500V**
- Output current: 3.5A **to 240A**
- Unidirectional;
- Auto -Ranging;
- **Master-Slave parallel or serial** of up to 5 identical units;
- TFT color LCD display; LAN, RS232, optional GPIB interface;
- SCPI and ModBus RTU protocol

DC Power Supply

MCB POWER-SPIN

3-phase input, Unidirectional

High-Power Programmable DC Power Supply



Features

- Output voltage: 10 V up to 1500 V
- Output current: 3.5 A to 12000 A
- Unidirectional
- Full-Range
- **15 kW/3U high power density**
- **Master-Slave parallel or serial function**
- 10 user programmable sequence files
- Internal resistance simulating, voltage remote sense compensation

DC Power Supply

MCB Power-GEN - Bidirectional Modular Programmable DC Power Supply



Features

- Bidirectional
- Auto-Ranging
- Input Voltage: 3-phase up to 480Vac
- Power output: stand-alone modules **5kW - 180kW**
- Power output: paralleled **up to 1800kW**
- **3U/18kW** high power, 19" Rack design standard
- Output voltage: 80V to 2250V
- Output current: **up to $\pm 4500A$** .
- **Battery simulation** feature
- **PV array simulator** feature

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AC Power Supply

AC Power Supply

MCB Power-BOOST

1-phase input, 1-phase output

AC Power Source up to 7.5 kVA



Features

- Stand-alone Rack 19'': from 1.5 kVA to 7.5 kVA
- Equipped with half bridge inverter with compact **3U** enclosure from **1.5kVA to 7.5kVA**
- Isolated output as option
- Standard **double output voltage** 2-150Vac and 4-300Vac
- Two upgrade packages [Basic, Deluxe]
- Communication Interfaces [Remote Control]:
- RS-232, Ethernet, Dry Contacts
- Communication Protocols: SCPI (RS-232 & Ethernet)
- Overload [150% up to 6 secs]

AC Power Supply

MCB Power-BOOST VERSATILE 3-phase input, 1-phase/3-phase output AC Power Source to 2000 kVA



Features

- Stand-alone system **up to 2000 kVA**
- **Regenerative/Bidirectional** equal and **above 30kVA**
- Higher Output Voltage ranges [400Vac L-N, 600Vac L-N]
- Overload [200 % 2 sec; 150 % 5 sec; 125 % 15 sec]
- Remote Sensing
- **Step / Ramp Mode**
- **Soft Start**
- **3-phase independent voltage adjustment**
- **3-phase independent angle adjustment**

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DC Power-LOAD

DC Power-LOAD

Power-LOAD DC Regenerative High-Power Programmable DC load



Features

- **Single unit:** voltage: 0~2250V Current: 0~4500A Power: 0~180kW;
- **Master slave** parallel operation can reach 1.8MW4 ;
- **Voltage precision:** 0.05%+0.05% F.S; **Current accuracy:** 0.1%+0.1% F.S ;
- Power factor 0.99. Efficiency > 93% ;
- Wire loss **automatic compensation**;
- Constant voltage, constant current, constant power and constant resistance functions;
- Set up for voltage and current **slew rate**;
- **Battery discharge test function**;
- **Sequence and waveform functions.**



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