Customized Electronic Loads up to 500kW, bidirectional with energy recovery

EPS Electronic Power Supply will find the solution for your application! Made in Germany

The programmable DC loads of EPS Electronic Power Supplies with power regeneration offer new input voltages up to 1500V, currents up to 5100A, powers up to 200 kW and even cabinets up to 500kW. The devices include the typical modes Constant Current / Voltage (partly Power / Resistance) and are suitable for the most diverse areas of application.

In addition, the FPGA-based control unit (up to 200kW) provides several new features, such as function and arbitrary waveform generator as well as a table based regulation for monitoring temporal load profiles or for the simulation of nonlinear internal resistances, which can be formed by batteries or LED chains. Response times for control via analog or digital interfaces have been improved significantly thanks to the DSP-controlled hardware. The optional energy recovery function converts the supplied DC power into a synchronous sine current and feeds it back to the local or public grid. Thus the usual heat dissipation in burn-in test, alternator tests or battery capacity tests is almost completely eliminated while



60kW Master-Slave-System



Electronic tests which require higher dynamics for discharging

saving energy costs. The large resistive touch panel provides a more intuitive way of manual operation.

A share-bus or CAN-bus for balancing in parallel connection ensures the even distribution of the load current to each device.

- Operating modes Constant Voltage / Current (Resistance / Power)
- · HMI TFT Touchpanel
- Wide operating range of up to 1500V or 5100A as one unit
- Parallel operation for higher load capacity
- · Over-temperature protection
- Determination of the capacity of batteries in Ah (battery test)
- Batteries "in service" test, which examines actual load currents by an additional current input
- Programmable switch off limits to avoid total discharge of the battery
- Optional automatic isolation unit, 3-phases