

Customized AC/AC Converters up to 630kVA / 15-800Hz, bidirectional with Power Recovery

AC/AC Converters from EPS Electronic Power Supplies are characterized mainly by a unique variety of standard units as well as high flexibility in terms of customized devices. Made in Germany.

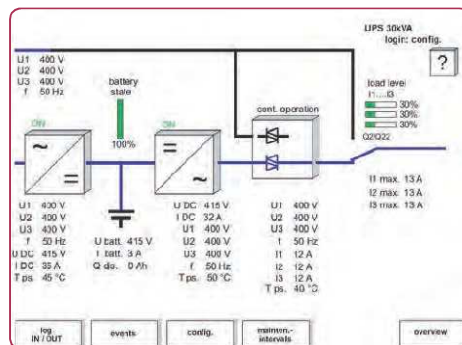
AC/AC Frequency Converters from 10 to up to 500kVA / 15-800Hz - also bidirectional

Our custom frequency converters generate a 1 or 3-phase output voltage from a 1 or 3-phase input voltage. The output frequencies are fixed or adjustable between 16.7 and 800Hz. A galvanic isolation is carried out with the downstream isolating transformer, which adjusts the voltage at the same time. The sinusoidal output voltage of the transformer is electronically controlled. As a result, this voltage is constant regardless of changes in load or input voltage.

The power flow can occur in both directions (option sink). There is a smooth transition between source and sink. Loads can therefore operate as source or sink and thus determine the power flow. For this reason, it is not possible to specify a current or power. For this reason it is not possible to specify the current or the power. The AC source / sink can be seen as a network simulator, with the specified voltage and frequency. Connected active loads need to synchronize to it.

An automatic filter charging circuit with resistors and bypass contactor limits the output current. The converter is also overload and short-circuit protected. For a short time, the inverter provides twice the rated current. The mains input voltage is monitored for overvoltage and undervoltage, which immediately stop the inverter.

The control unit, mainly with VGA-TFT touchscreen display, is the interface between device and user. Here you can call up measured values, set values can be changed and the operating mode can be selected. Multiple devices can be configured by one control unit. Remote communication takes place via a RS232 interface and an independent CAN bus or via an optional RS485 interface. Thus, it can be connected to a computer network.



TFT Touch panel for the programming of the output parameters



Bidirectionality: Charging of EV and PHEV with up to 600V and 30kVA



Avionic-Test 50kVA and 400Hz

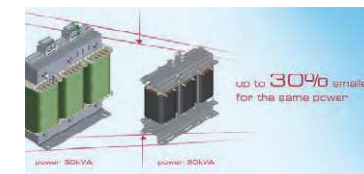
Transformers from 5 to 630kVA

Reducing the losses of a transformer is an important aspect in new developments. Our energy-efficient transformers will also save you costs. The new EPS transformers are 30% smaller in volume while delivering the same performance.

- Compact design thanks to innovative core technology
- Reduction of noise emissions by special core nesting
- Designed for the smallest volume possible
- Variable voltage choice
- Can be used worldwide according to international standards



Ship supply 20kVA



Aircraft ground support

Converter for 400Hz aircraft simulation

- 3-phase, wide input range, sinusoidal
- Constant current operation
- 400Hz input frequency possible
- Output selection: 3-phase AC output voltage or 3 individual DC voltages
- Each output (voltage, frequency) is separately programmable via RS232 interface
- Various integrated control and protection functions

Switch- On Current Limiter 1 and 3 Phase

Inrush currents can lead to unwanted triggering of fuse elements when loads are switched on. The switch-on current limiter is the solution, if you need to selectively protect individual circuits. This new switch-on current limiter not only limits the switch-on surge - as with traditional switch-on current limiters - but avoids it altogether thanks to the soft-switch process. The relay can also be used as a power switch, when it is activated via the control input (there is no potential isolation in this application).