CURRENT REVERSIBLE CONVERTER
AC to DC - DC to AC - AC to AC - DC to DC

40 kW - 750V - 200A

Battery emulation with simulation of internal resistance
Supply of DC or AC motors
Regenerative (2 quadrants)

- High accuracy 0.5%
- High efficiency > 93%
- Transients (10%–90%) ≤ 100 µs
- Very low noise
- Very low output impedance
- 100% absorption capacity
- Regenerative
- HVDC grids up to 3000V

Current reversible converter, its regulation FPGA based includes advanced features of emulation and calculation: emulation of internal resistance, SOC calculation, hour-meter.

Can be used as a DC power source or as a regenerative DC load on its three-phase grid, up to the limit of its nominal power.

Its insulated 0-10V analog bus (pilot, voltage image, current image) make it usable as an amplifier in a PHIL system (Power Hardware In the Loop).

Several units can be connected in parallel, in-series, or in matrix to create a high-power grid within the voltage range of ± 1500 VDC.

Associated to a manager rack, it can be remote using an Ethernet or RS 485 link (protocols TCP/IP and ModBus).
OUTPUT FEATURES

Power
- Rated power: 40 kVA
- Efficiency at full power: 93%

Operating as a generator
- Output voltage: 0 to 750 VDC, 0 to 260 VRMS
- Output current: 0 to 200 ADC (53 ADC at 750 VDC), 0 to 140 ARMS
- Output frequency: DC to 5 kHz
- Distortion: < 1%

Operating as regenerative load
- Min voltage: 10 VDC
- Max current: - 200 ADC
- Operating range: 10 to 750 VDC

Accuracy
- Voltage: 0.5% of full scale
- Current: 0.5% of full scale

Voltage and current variation
- Rising time (10%-90%) of rated voltage: < 100 µs
- Rising time (10%-90%) of rated current: < 100 µs

Specification may change without notice