



THE CONSORTIUM BATTERY EQUIPMENT

HEAD Q.: Via Ongari 16/1 36030 S. Vito di L.  
Vicenza Italy  
PRODUCTION U. Vicenza, Milano & Bergamo  
tel: +39 0445 069080  
fax: +39 0445 069079

## BATTERY CHARGERS, RECTIFIERS

OUR RECTIFIERS ARE THE MOST ADVANCED EQUIPMENTS EXISTING TODAY,



We developed (20es) and produced the new family of RECTIFIERS, capable to charge and discharge, based on three-phase inverters. This technology allows to obtain:

- High accuracy
- Energy recovery towards the main
- A.C. current programmable power factor
- Very low harmonic distorsion on a.c. network
- Electrical isolation of each rectifier against the others

Our innovative technology is consolidated because we built more than 2000 rectifiers during the last 5 years.

The rectifiers are structured for heavy duty service and can work at maximum rated power 24 hours / 7 days a week.

The reliability and durability are very high: our statistic survey show a **MTBF of 250.000 hours** in a population of **1000 rectifiers**.

Efficiency of a whole cabinet containing 16 rectifiers is more than 94%, the efficiency of the single rectifier is 97,5%.

High safety for human operator: the rectifiers mounted in the same cabinet (12 or 16 each cabinet) are each other electrically isolated.

Energy saving in formation is due to the very correct waveform besides the software management of the formation plant.

### FEATURES OF EACH RECTIFIER MODULE

- Charge operating in constant current mode and/or constant voltage
- Optional :discharge circuit on resistive ballast about 1,5/2Amp
- Adjustable output current from 0 to 30A
- Adjustable output voltage range from 12 to 370V (430V)

CONSORTIUM BATTERY EQUIPMENT: CHARGING AND LABORATORY

Web: [www.cbeequipment.com](http://www.cbeequipment.com) email: [info@cbeequipment.com](mailto:info@cbeequipment.com)

DATA HERE CONTAINED ARE ONLY FOR REFERENCE



THE CONSORTIUM BATTERY EQUIPMENT

HEAD Q.: Via Ongari 16/1 36030 S. Vito di L.

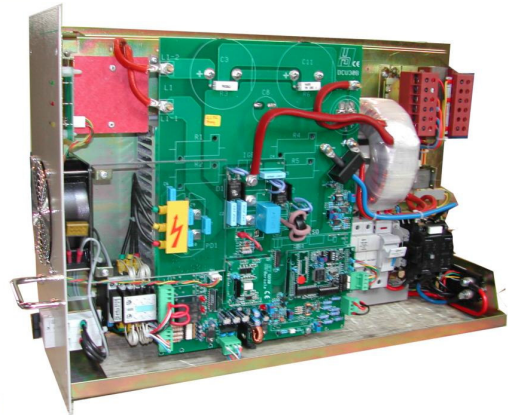
Vicenza Italy

PRODUCTION U. Vicenza, Milano & Bergamo

tel: +39 0445 069080

fax: +39 0445 069079

- Regulation stability:  $\pm 0.5\%$  for input voltage variation of  $\pm 10\%$  and/or load variation from 10 to 90% into the output voltage range from 12 to 370V
- Current ripple 1.5% max measured in the battery circuit; 0.15% measured in a resistive circuit max
- No. 3 led on the module's front to indicate: ON state, OFF state, Failure
- Remote start/stop input
- Built-in local control microcomputer PENTA-b RCM5
- Measurement of the following values:
  - Voltage with resolution 0.1V
  - Current with resolution 0.01A
  - Capacity in Amp-hours with resolution 0.1Ah
  - Temperature with resolution of  $0.1^\circ\text{C}$
  - Time with resolution 1 min
- Drop voltage compensation: it's possible to compensate the drop voltage on the plant wires by means of remote sensing leads (or via software)



- ▶ COMPUTER CONTROLLED RECTIFIERS
- ▶ CHILLED WATER CONTAINERS FOR LABORATORY
- ▶ SUITABLE FOR ALL TYPE OF CHARGING:
  - DRY CHARGE
  - WATER COOLED CHARGING
  - CLOSE LOOP FORMATION
  - PULSE

Laboratory equipment for all type of battery:

- ▶ AUTOMOTIVE BATTERIES
- ▶ INDUSTRIAL BATTERIES
- ▶ TRACTION BATTERIES (ALSO FOR AUTOVEHICLES)
- ▶ STATIONARY BATTERIES
- ▶ SEALED STATIONARY BATTERIES
- ▶ ZINC-AIR BATTERIES
- ▶ FUEL CELLS

HIGHEST  
ACCURACY AND  
RELIABILITY  
BATTERY  
TESTING AND  
PRODUCTION  
SYSTEMS

CONSORTIUM BATTERY EQUIPMENT: CHARGING AND LABORATORY

Web: [www.cbeequipment.com](http://www.cbeequipment.com) email: [info@cbeequipment.com](mailto:info@cbeequipment.com)

DATA HERE CONTAINED ARE ONLY FOR REFERENCE