

## Multiple Circuit Charge/Discharge Rectifier Type CDR 600-8

Technical data



## **Main technical features:**

1. Working conditions:
  - Ambient Temperature: 10-40 °C,
  - Rel.humidity, non condensing: 90%RH;
2. Power supply: 3 x 380V / 50Hz (or 60Hz);
3. Power consumption: up to 250 KVA
4. Number of independent charge/discharge channels: 8; All circuits are galvanically isolated.
5. Ability to work in parallel mode;
6. Output current in charge and discharge mode for single channel: 0 - 75A;
7. Max. output current in parallel mode : up to 600A (depending on number of channels working in parallel);
8. Output voltage: 30 - 360V;
9. Accuracy of current :  $\pm 0.5\%$  +0.2A. Resolution: 0.1 A;
10. Accuracy of voltage :  $\pm 0.2\%$  Full Scale. Resolution: 0.1V;
11. ADC : 12 bit;
12. Circuit voltage measurement for each channel;
13. Temperature measurement for each channel;
14. Work modes:
  - Charge,
  - Discharge,
  - CC (constant current),
  - CV (constant voltage),
  - CP (constant power);
15. Microprocessor control;
16. Interface for connection to a centralized management system – RS485;
17. PLC for each channel, which provides:
  - Temporary storage of process's data in case of a lost connection to a PC and immediately sending it to the PC when connection is restored ;

- Visualization of main process's parameters-current, voltage, amperhours etc.;
  - Auto restart after restoring of broken power supply;
  - Data acquisition rate – 100 ms;
18. Electronic commutation when switching charge and discharge modes;
19. Mechanical construction :
- All essential circuit components such as fuses, pulse control boards, SCR's, and contactors are mounted on pannels. This can be easily serviced in case of a component failure.
  - Cabinet dimensions (W x D x H) [mm] : 1500 x 850 x 1920;
  - The total weight is estimated about 2000 kg;
20. Components used:
- Power transformers and chokes – AQ group AB;
  - Thyristors modules – Semikron or IR;
  - Fuses, contactors and relies – Schneider electric and ABB.
21. Operator safety:
- All outputs are galvanic isolated;
  - A main circuit breaker protects personnel when performing maintenance on the rectifier cabinet;
  - Each circuit is protected by a 3-pole breaker and contactor to isolate the circuit from the high voltage of the main transformer and the string of batteries.

### **Test management and data logging software : Battery Test Manager (BTM 2.0) :**

- Creation and editing of programs,
- Grouping circuits for parallel work,
- Uploading, starting, stopping and interrupting of programs,
- Visualization of current state on main window,
- Storing sample measurement data for all processes in a database,
- Visualization of stored data from database, drawing charts etc.,



PMC

Rectifiers & Testers

***PMC Ltd***

**Bulgaria, 8800 Sliven,**

**tel / fax +359 44/62 48 59, Mobile: +359 887 811 366**

**E-mail: [office@pmc-bg.com](mailto:office@pmc-bg.com), [pmc@mbox.contact.bg](mailto:pmc@mbox.contact.bg)**

**Website: [www.pmc-bg.com](http://www.pmc-bg.com)**

---

- Printing report data,
- Export to Excel