

SCR power supply

1 Overview

SCR DC power supply panel is a new generation of DC power supply product which adopts the most mature SCR rectification technology in DC field and Siemens PLC touch screen with a set of system software developed by our company for many years. The most suitable and reliable components at home and abroad are selected for each component.

Compared with the traditional DC panel, its display operation unit is equipped with Siemens touch screen, which can be operated intuitively by man-machine dialogue; its control unit is equipped with a high-performance Siemens PLC, which realizes comprehensive monitoring and closed-loop control by real-time scanning of each component of the DC panel; the power module is equipped with redundant configuration of two 12-pulse SCR modules, which can reliably convert AC power into high-quality DC power.

2.

Tube, oil field, chemical, metallurgical and other industries

3. Features

- It can operate reliably in harsh environments such as poor quality, large fluctuation of grid, high interference of harmonic source, and humid environment;



- Strong overload capacity;
- The charging module meets the requirements of the even and float charging characteristics of the battery pack, and has soft start characteristic;
- The control system adopts 32-bit industrial high-speed microprocessor and fully automatic SMD process, its performance is stable and reliable;



- The 12-pulse rectifier phase-shifting control technology is adopted to ensure that the output voltage ripple is at a low level, so that the battery is in a good charging state and the optimal service life of the battery is ensured;

- Modular structure for live maintenance and replacement;
- High-performance and high-speed controller is used to monitor and control the components of the system in real time. It has flexible programming, beautiful and generous, easy operation and strong anti-interference ability;
- Perfect fault detection and alarm function, real-time detection of load status, load current, control signal, feedback signal loss and other parameters; with historical alarm function;
- Intelligent control scheme adapts to different nature loads and has good dynamic characteristics;
- With digital constant current and constant voltage function and current limiting and voltage limiting function, accurate control of load can realize abnormal protection of overcurrent and overvoltage.

4. System composition

The DC system consists of AC power distribution unit, lightning protection unit, rectifier module unit, monitoring unit, bottom module acquisition unit, step-down unit, DC distribution unit, and battery pack unit. Each monitoring unit in the system is managed and controlled by the main monitor, and the information collected by each bottom unit is transmitted to the main monitor through the RS485 communication line.