

KDW1140/24B Flame-proof and Intrinsically Safe DC Stabilized Power Supply for Coal Mines

Application:

KDW1140/24B Flame-Proof and Intrinsically Safe Dc Stabilized Power Supply for Coal Mines (hereinafter referred to as power supply) is a class ib power supply which mainly supplies power to underground sub-stations and sensors. The power supply has multiple outputs and is completely isolated. Each power supply has overvoltage, overcurrent, and short circuit protection. The backup battery uses an environmentally friendly nickel-hydrogen battery pack.

Features:

- The power supply has overvoltage, overcurrent, and short circuit protection, as well as automatic recovery after the fault is removed
- The backup power supply has the functions of overcharge, over-discharge, over-temperature, and short circuit protection. It can work continuously for more than 4 hours under full load in case of AC power failure.
- The power supply can remotely charge, discharge, and maintain the backup power supply. Maintenance personnel can remotely force battery discharge and AC power recovery through the computer at the ground station.
- The power supply has the functions of uploading information such as AC and DC status, battery remaining and voltage of backup power supply. The information can be uploaded to the sub-station and displayed.

Technical parameters:

- AC input:
 - ◆ Rated input voltage: 127V/220V/380V/660V/1140V AC
 - ◆ Frequency: 50 Hz
 - ◆ Harmonic: <10%
 - ◆ Allowed deviation: -25%~+10%
 - ◆ Input power: ≤180 W
- DC output:
 - ◆ 24V output: rated output voltage: 24.5V; rated output current: 470 mA; output lines: 4
 - ◆ 12V output: rated output voltage: 12.5V; rated output current: 1.6A; output line: 1
 - ◆ 18V output: rated output voltage: 18.5V; rated output current: 800mA; output line: 4
- Backup power supply:
 - ◆ Switch-over time: ≤100ms
 - ◆ Battery maximum charging current: 1000mA
 - ◆ Battery over-discharge level: 21V
- Explosion-proof type:
 - ◆ mining intrinsically safe (Ex-mark: Exd[ib] | Mb)

