

## BATTERY CHARGER AND CONTROL SYSTEM

### NAVY SHIPBOARD APPLICATION



Espey designed and manufactures this battery charger and control system consisting of a charger assembly and a battery rack assembly. This system provides starting power and control systems power to a shipboard Emergency Diesel Generator (EDG). In addition, the charger assembly also provides conditioned 24 VDC to the EDG Auxiliary Logic Controller during “normal power” as well as emergency situations.

### Features:

- Multi Stage Charging Algorithm
- LCD User Interface
- LED Status Indicators
- Manual and Automatic Control Mode
- Output voltage adjustable
- Communication via Profibus DB, 500 Kb/s
- Programmable Low Voltage Shutdown prevents full battery discharge
- Temperature Compensation maximizes battery life

### Specifications:

#### ELECTRICAL SPECIFICATIONS

- Charger Input: 440 VAC nominal, single phase, 2 kVA maximum, 4.5 A maximum, .8 lagging to .95 leading PF
- Charger Output: Charger: 27 V (adjustable), 0 to 50 Amps
- Aux Output: 24V nominal, 0 to 4 Amps
- Battery Connected Load: 850 Amp maximum

#### MECHANICAL SPECIFICATIONS

- Combined Weight: Approximately 1020 lbs when loaded with batteries
- Shock: MIL-S-901 Grade A
- Vibration: MIL-STD-167-1, Type I, from 4 to 15 Hz
- Enclosure: IP54
- Cooling: Natural convection