# DMAC

# Phantom

## 1400 | 1600 | 1800 | 2000 SERIES

## **FEATURES**

- Ferroresonant technology automatically regulates output for a precise and complete charge cycle
- Energy efficient charging saves operation costs
- Extends battery life with automatic stop/start controllers
- Available with 2200 dv/dt or 3500 dv/dt-di/dit automatic charge controls
- Designed and manufactured for years of trouble free service
- 10 year warranty
- Single and three phase models with selectable AC input voltages
- UL and CUL listed



## **INDUSTRIAL BATTERY CHARGERS**

## Automatic chargers for single and multi-shift applications

Series 1400	Series 1600	Series 1800	Series 2000
Recharge 80% discharged battery in 12 hours or less	Recharge 80% discharged battery in 8 hours or less	Recharge 100% discharged battery in 8 hours	Recharge 100% discharged battery in 6-8 hours or less
14 amps per 100 amp hour capacity start rate	16 amps per 100 amp hour capacity start rate	18 amps per 100 amp hour capacity start rate	20 amps per 100 amp hour capacity start rate

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**AC Interrupt Protection** 

automatically restarts upon

In the event of AC power

interruption the charger

the resumption of AC

Status Lights

**Energy Saving** 

Provides important

operation information on

both charger and battery throughout the charge

Significant reductions in the

cost required to charge a

battery through precise

charge termination.

power.

cycle.

## 2200 Charge Control DV/DT



dv/dt Control monitors battery condition and automatically determines when to shut the charger off.

## Auto start/stop

2200 charger starts automatically after connecting charger to the battery Charge terminates when battery receives proper charge.

## **Fail-safe Protection**

Internal backup time terminates charge cycle in the event of abnormal conditions. Red Abnormal Cycle status lights will illuminate.

## Features

dv/dt di/dt monitors the charge cycle from start to finish and terminates automatically when battery is completely charged.

## Selectable delay start

provides for battery cool down and allows for cost effective off-peak charging.

## Digital display shows charging current, amphours returned, cool down time, delay start time, equalize select, equalize in progress.

automatic shut down and fault displayed for high or low volts per cell, low current, back-up timers activated and output cable disconnected while charging.

Automatic refresh keeps battery topped up after a charge cycle.

Adjustable 80% voltage point, low battery override, electronic back-up timers, battery/charger mismatch protection.

## Charge Control DV/DT DI/DT 3500



**Mechanical Configuration** 

### ⊣C⊢ CASE TYPE "A" DIM "B" DIM "C" DIM "D" DIM "F" DIM "F" DIM "G" DIM F CASE 14.156 22,563 14.234 12.625 12.000 5.125 13.000 G CASE 20.312 25.063 21,484 19.105 7.750 19.000 18.750 B H CASE 27.156 25.062 24.236 25.625 21.790 9.625 20.000 -|G| J CASE 32.812 32.000 24.750 30.500 21.274 9.750 22.039 Ô F

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**Fault Diagnostics**