



**Kinetek Controls®**

A Kinetek Company®

# Mark I High Frequency Battery Charger

KCCA0010 — 36V DC, 21A maximum

KCCA0011 — 24V DC, 26A maximum

KCCA0012 — 48V DC, 16.5A maximum

KCCA0013 — 72V DC, 11A maximum

KCCA0014 — 12V DC, 26A maximum

**Kinetek Mark I High Frequency Battery Chargers** operate from 100 to 140V AC, 60 Hz power. Chargers are available in the four models/capacities listed above. Sophisticated control circuitry ensures an optimum charging sequence, varying the charging rate to provide a finished charge without stressing battery elements. All Mark I chargers are fully automatic and provide a three-stage charging sequence:

- Main Charge - Maximum current to the battery to a preset voltage level.
- Finish Charge - Regulated voltage level to the battery to a preset current level.
- Equalization Charge - Regulated finish current level until reaching the preset equalizing voltage level at which point the charger enters Adaptive Equalization Mode, regulating output at equalization voltage for a period of time directly proportional to the depth of discharge until charge cycle termination.

This microprocessor controlled charging sequence matches the charging algorithm preferred by battery manufacturers. The high frequency Kinetek design allows the physical size and weight of the charger to be minimized along with heat generation — all models cool through natural convection and require no noisy, failure-prone, cooling fans.

Mark I chargers are compatible with AGM, GEL and Flooded electrolyte battery systems.



Mark I High Frequency Battery Chargers provide battery manufacturer preferred, three-stage charging cycles, maximizing battery life and delivering a properly finished charge everytime.

### Input Specifications

ALL MODELS	Voltage Range	Current
	100-140V AC / 60 Hz	12A maximum

### Output Specifications

ALL MODELS	Efficiency	Ripple Voltage	Voltage Accuracy	Voltage Stability	Current Accuracy
	90%	0.1V at full load	0.5%	± 0.2V	5%

### Features

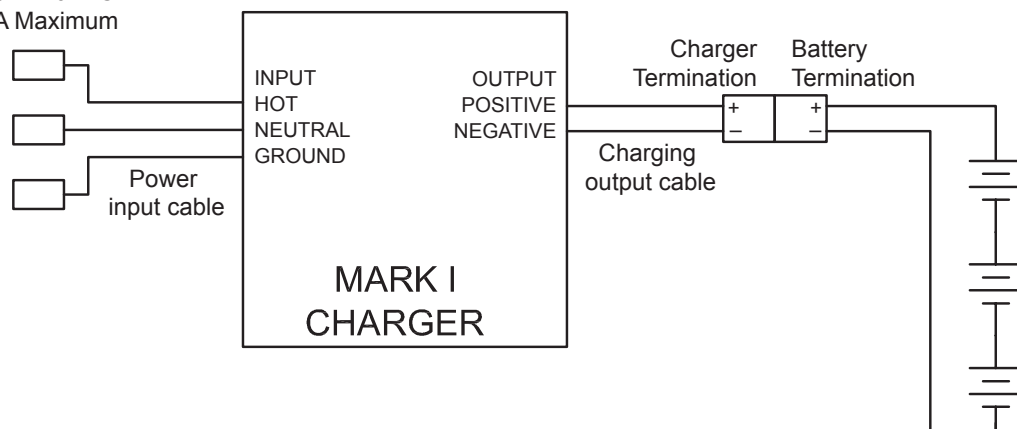
- Automatic three-stage charging sequence
- Automatic current and voltage limits
- Automatic battery disconnect and short circuit detection
- Temperature compensation
- Low ripple voltage (0.1V RMS at full load)
- Durable, continuous, maximum output use
- Programmed charge soft start
- Automatic restart if charging battery is swapped out
- Terminates charge if charge rate falls below a preset value
- Reverse polarity protection
- Standard or customer-supplied charging terminations
- Simple, high visibility LED diagnostics
- Compact size; light weight; quiet operation
- Natural convection cooling
- Optimized charging sequence provides finished charge and maximizes battery life
- Easily accessible, front panel mounted, slow blow fuse, circuit protection
- Drip tight, steel enclosure

### Kinetek Controls

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# Mark I High Frequency Battery Charger

100 - 140VAC  
12A Maximum



+12V to +72V  
85AH to 300 AH

## Specifications

MARK I, STANDALONE CHARGER MODEL SPECIFICATIONS	
KCCA0010	36V DC, 21A Maximum
KCCA0011	24V DC, 26A Maximum
KCCA0012	48V DC, 16.5A Maximum
KCCA0013	72V DC, 11A Maximum
KCCA0014	12V DC, 26A Maximum
MARK I, STANDALONE CHARGER GENERAL SPECIFICATIONS	
<b>Input</b>	
Voltage Range	100 to 140V AC 60Hz
Current	12A Maximum
<b>Output</b>	
Efficiency	90%
Ripple Voltage	.1V at Full Load
Voltage Accuracy	0.5%
Voltage Stability	± .2V
Current Accuracy	5%
<b>Environmental Conditions</b>	
Ambient Temperature	-20°C to 50°C
Storage Temperature	-40°C to 60°C
Relative Humidity	15% to 95%
Enclosure Type	Drip Tight
<b>Safety Features</b>	
Soft Start to Charging Cycle	Short Circuit Detection
Reverse Polarity Detection and Shutdown	Over Temperature Compensation
<b>Physical Specifications</b>	
Dimensions	7.4" W x 9.4" H x 8" D
Weight	12 lbs.
Housing	Steel
Ventilation	Rear Exposed Heatsink, Bottom Vents, Side Louvers
Power Cord Input	Standard IEC 320 – Front Panel
Output Cable	Reinforced, 2 Conductor #10 – Front Panel
LED Location	Front Panel
Line Fuse	3AG, Slow Blow, 15A Fuse – Front Panel



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