



Unit Shown: RHF-30-24V-U1

Railroad High Frequency Applications

The La Marche model RHF series uses proven High Frequency charging technology and is developed specifically for the railroad market. It is typically used for signaling, highway crossing and motion detection systems where the battery is cycled frequently.

This filtered unit is designed and built to charge VRLA, Flooded Lead Acid and Nickel Cadmium batteries. One of the features that make this product unique is lightning protection.

The RHF series is equipped with AAR style hardware on the input and output connections. temperature compensation is standard to increase the longevity of the batteries and charger. The unit is designed to achieve MTBF in excess of 100,000 hours.

Standard Features

- Microprocessor Controlled High Frequency Charging Technology
- Wide AC Range (105-264 VAC, 45-65Hz)
- Complete Isolation from AC to DC
- VFD Digital Voltmeter & Ammeter
- Adjustable Current Limit from 50% to 105%
- Filtered Output for VRLA Batteries
- Meets AREMA Specifications
- Meets ANSI C62-41
- Power Factor Correction Better Than .90 Within 20-100% Of Rated Load
- 1 Set of Form "C" Dry Type Alarm Contacts for Charger Fail Alarm

Optional Accessories

- **21X** Ethernet Communications (SNMP and Remote Monitoring)



Model Number	DC Output		AC Input Current Draw @ 100% (load)	Overall Dimensions W x D x H	Case No.	Net Weight*	
	Amps	Volts (Nominal)				lbs	kgs
RHF-20-12V	20	12	3.4 amps at 120 VAC 1.7 amps at 240 VAC	9.57 x 4.55 x 15.75 in 243 x 115.5 x 400 mm	102	9.8	4.4
RHF-40-12V	40	12	Consult Factory				
RHF-60-12V	60	12	Consult Factory				
RHF-10-24V	10	24	2.65 amps at 120 VAC 1.3 amps at 240 VAC	9.57 x 4.55 x 15.75 in 243 x 115.5 x 400 mm	102	9.8	4.4
RHF-20-24V	20	24	5.12 amps at 120 VAC 2.2 amps at 240 VAC	9.57 x 4.55 x 15.75 in 243 x 115.5 x 400 mm	102	9.8	4.4
RHF-30-24V	30	24	5.8 amps at 120 VAC 3.6 amps at 240 VAC	9.57 x 4.55 x 15.75 in 243 x 115.5 x 400 mm	102	9.8	4.4
RHF-50-24V	50	24	Consult Factory				

*Weight does not include shipping packaging

Charger Specifications

- **AC Input**
105 VAC - 264 VAC
Single Phase 45Hz to 65 Hz
- **Line Regulation**
±10%
- **Efficiency**
>85%
- **Power Factor**
>0.95
- **Load Regulation**
<±0.5%
- **Input Protection**
Fuse with surge and transient protection
- **Output Current Limit**
Factory set at 100%, adjustable from 50-105%
- **Output Protection**
DC breaker or fuse with surge protection
- **Over Voltage Protection**
- **Short Circuit Protection**
- **Thermal Protection**
- **Meters**
LCD DC Output Digital Voltmeter
and Ammeter (1%)
- **Adjustable Voltage Range (per cell)**
Lead-Acid Cells: 2.15 VDC to 2.35 VDC
Nickel-Cadmium: 1.39 VDC to 1.49 VDC

- **LED Indicators**
Current Limit
AC On
Charger Fail
- **Environmental**
Operating: 0° to 50°C (32° to 122°F) (Derated up to 70°)
Storage: -40° to 85°C (-40° to 185°F)
Relative Humidity: 0 to 95% non condensing
- **DC Output**
10A - 12V or 20A - 12V or 10A - 24V
Field selectable output
40A - 12V or 20A - 24V
Field selectable output
- **Mounting**
Shelf and wall mounting
- **Cable Entry**
Button
- **Finish**
Powder coat finish (RAL 7032)
- **Standards**
Meets AREMA specifications
Meets ANSI C62-41
- **Optional**
21X Ethernet Communications (SNMP & Remote
Monitoring)

