

## Switchmode Rectifier 48 or 125VDC



A98M System with PC98M-80-125V-1 Shelf and four A98M-20-125-V1 Rectifier

The La Marche A98M provide highly reliable, hot swappable 48VDC or 125VDC, power with full load sharing capability in a compact, modular rectifier system. At a height of only 4RU in a four across rack configuration it offers high power density. With current limiting circuitry, voltage regulation, high efficiency and high power factor, the A98M is the ultimate modular rectifier.

La Marche A98M systems provide highly filtered DC power which helps extend the life of the battery, and it can also be used as a power supply/battery eliminator. The loss of one rectifier will not affect the operation of the remaining rectifiers. Complete front panel accessibility and a hot plug-in design ensure quick, convenient, installation without the need to shut down the system.

The modules are available in 120VAC and 208/240VAC input ranges, with a frequency range of 45-66 Hz. Steady state output voltage remains within  $\pm 0.5\%$  of the setting from no load to full load to handle charging today's diverse battery technologies.

### A98M Features

- Single Phase AC Input
- Compact, Modular System
- Hot Plug-In Design
- Power Factor Correction Circuitry
- Active Load Sharing
- 93% Efficiency
- Load Distribution:
  - 2 Load Terminals
  - Battery Terminal
- Protection:
  - Battery Under Voltage Protection (Load Low Voltage Disconnect (LLVD))
  - Individual Module Status Monitoring
  - Multiple Alarm Severity Levels
- Fan Cooling (variable Speed based on Temperature)
- 19 or 23" Rack Mounting
- 2 Year Warranty

### Controller

- AC Power monitoring
- Separate Load and Battery Power/Current Monitoring
- Events Log
- Battery Temperature Compensation
- Battery Test
- Energy Saving and Rectifiers Efficiency Management
- 6 Dry Alarm Contacts (Field Assignable)
- 4 Digital Inputs (programmable)

### Communication Protocols

- SNMP TCP/IP Communications



# A98M CHART

	Model Number	DC Output		AC Input			Overall Dimensions W x D x H	Cable Entry		Mounting	Shipping Weight	
		Amps	Volts	AC Input Phase	Volts	Amps		AC Input	DC Output		lbs	kgs
Rectifier	A98M-50-48-V1	50	48	1	208/240	13.7	9.87" x 4.00" x 3.25" 251 x 102 x 83 mm	---	---	---	4.6	2.1
	A98M-7-130V-A1	7	130	1	120	9.94	9.87" x 4.00" x 3.25" 251 x 102 x 83 mm	---	---	---	4.6	2.1
	A98M-20-130V-V1	20	130	1	208/240	14.2	9.87" x 4.00" x 3.25" 251 x 102 x 83 mm	---	---	---	4.6	2.1
Shelf	PC98M-80-130V-V1	Up to 80	130	1	120/208/240	Up to 60	17.25" x 16.12" x 5.12" 438 x 410 x 130 mm	REAR	REAR	19/23"	17.5	7.9
	PC98M-150-48V-V1	Up to 150	48	1	120/208/240	Up to 60	17.25" x 16.12" x 3.5" 438 x 410 x 89 mm	REAR	REAR	19/23"	17.5	7.9

## SPECIFICATIONS

### INPUT

- **Input Voltage Range**  
A1: 90-154VAC  
V1: 188-264VAC
- **Input Frequency Range**  
45-66Hz
- **Power Factor**  
Power factor correction circuitry corrects the input power factor to 0.99 at full-load.

### PROTECTION

- **Current Limit**  
Maximum output current limited at 110% of its rated value.
- **Walk-In Circuit**  
Output voltage will gradually increase after the charger is turned on, eliminating surges and over-shoot.

### CONTROLS

- **Float/Equalize Switch**  
Rectifiers may be equalized locally via front panel switch.

### OUTPUT

- **DC Output**  
DC Volts: 48VDC or 125VDC
- **Efficiency**  
93%
- **Regulation**  
Dynamic response (with battery).  
Maximum voltage transient will not exceed  $\pm 10\%$  of initial steady state voltage for a step change from 20% to 100% of the full rated load. Recovery to steady state voltage regulation range does not exceed 50ms and all transient behavior disappears within 100ms.
- **Steady State**  
Typical output voltage is  $\pm 0.5\%$  of the setting from no load to full load over the specified input voltage, and ambient temperature ranges.

### ENVIRONMENTAL

- **Operating Temperature**  
0°C (32°F) to 55°C (130°F)
- **Storage Temperature**  
-40°C (-40°F) to 85°C (185°F)
- **Humidity**  
0% to 95% relative humidity, non-condensing

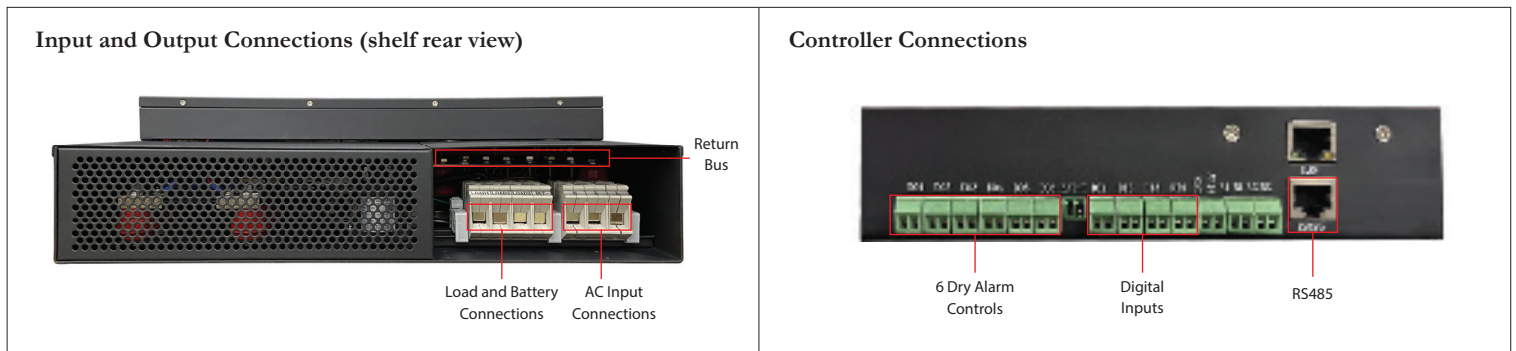
### FILTERING

- **Ripple Voltage**  
With Battery Connected  
< 30 mV RMS  
Without Battery Connected  
< 45 mV RMS

### ADDITIONAL

- **Audible Noise**  
Less than 54dBA at any point three feet from any vertical surface of the rectifier.
- **Cooling**  
Fan Cooled

## CUSTOMER CONNECTIONS



## A98M CONTROLLER SPECIFICATIONS

**Controller Interface Includes:**

- LCD Display
- LED Indicators
- 6 Dry Alarm Contacts
- 4 Digital Inputs
- ON
- Alarm (Fault)
- Battery Temperature Sensor Input