SBC Data Power Inc.
1760 Monrovia Avenue, Suite C8
Costa Mesa, Ca 92627
Ph 949 646 8191 www.sbcdatapower.com

Unit shown: A97-60-130V-V1-60L

Unit shown: A97R-40-130V-V1

Utility Switchmode Rectifier

The La Marche A97 Series is a High Frequency Switchmode Rectifier System. This compact model provides highly reliable and efficient DC power. The A97 Rectifier System features current limiting circuitry, voltage regulation, high efficiency and high power factor, which makes it suitable for many DC applications.

The A97 model is equipped with a 2-line LCD display, alarm LED indicators and discrete alarm contacts to provide DC system status. This model is offered in 48V and 130V output capabilities. All A97 models operate over a range of 185-264 volts (45-66Hz) AC line. Its steady state output voltage remains within ±0.5% regulation of the setting from no load to full load to handle charging today's diverse battery technologies.

Standard Features

- High Frequency Switchmode Technology
- Battery Eliminator
- Power Factor of 0.99 at Full-Load
- Efficiency up to 93%
- Front Panel LCD Display Monitors DC Voltage, DC Amp and Alarm
- Adjustable Float / Equalize
- Multi-Mode Equalize Timer; Adjustable from 1-144 hrs with five selectable modes: Standard, 7-day, 14-day, 30-day and Auto Equalize on Low DC Voltage
- AC & DC Breaker
- Combination Alarm Package
- High Voltage Shutdown
- AC Power Failure Alarm with Form "C" Contacts
- Walk-In Circuit
- 1-Year Warranty

Optional Accessories

086 Wheeled Cart for A97W

Communication Protocols

21J IEC61850

21P DNP 3.0 Communications RS232/RS485/Ethernet

21Q Modbus Communications RS232/RS485/Ethernet

21S Modbus RTU - Serial Data Port

21X SNMP

Unit shown with Wheeled Cart 086 Option

MADE IN U.S.A.
Specifications subject to change without notice

P25-DSA97-1
ECN 20422
08/14

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sales@lamarchemfg.com
www.lamarchemfg.com

	Model Number	DC Output		AC Input Phase	DC Breaker	Nominal Current Draw @ 100% Load (Amps)	AC Feeder Breaker Size	Case No.	Overall Dimensions W x D x H	Cable Entry (when facing unit)		Mounting	Shipping Weight	
		Amps	Volts							AC Input	DC Output		lbs	kgs
48 VDC 24L or 37NC	A97R-50-48V-V1	50	48	1	60	15	20	96RW	16.4 x 18.38 x 8.75	RIGHT/BACK	LEFT/BACK	19/23" Rack	49	22.3
	A97R-100-48V-V1	100	48	1	120	30	35	96RW	417 x 467 x 222 mm	RIGHT/BACK	LEFT/BACK	19/23" Rack	60	27.3
	A97W-50-48V-V1	50	48	1	60	15	20	96RW	19.02 x 9.30 x 18.38	RIGHT/TOP/BOTTOM	LEFT/TOP/BOTTOM	WALL	49	22.3
	A97W-100-48V-V1	100	48	1	120	30	35	96RW	483 x 236 x 467 mm	RIGHT/TOP/BOTTOM	LEFT/TOP/BOTTOM	WALL	60	27.3
	A97-150-48V-V1	150	48	1	200	45	60	4	19 x 15 x 24	RIGHT	LEFT	19" or 23" RACK/WALL/FLOOR	130	59.1
	A97-150-48V-V3	150	48	3	200	28	50	4	483 x 381 x 610 mm	RIGHT	LEFT		130	59.1
130 VDC 60L or 92NC	A97R-20-130V-V1	20	130	1	25	15	20	96RW	16.4 x 18.38 x 8.75	RIGHT/BACK	LEFT/BACK	19/23" Rack	49	22.3
	A97R-40-130V-V1	40	130	1	50	30	35	96RW	417 x 467 x 222 mm	RIGHT/BACK	LEFT/BACK	19/23" Rack	60	27.3
	A97W-20-130V-V1	20	130	1	25	15	20	96RW	19.02 x 9.30 x 18.38	RIGHT/TOP/BOTTOM	LEFT/TOP/BOTTOM	WALL	49	22.3
	A97W-40-130V-V1	40	130	1	50	30	35	96RW	483 x 236 x 467 mm	RIGHT/TOP/BOTTOM	LEFT/TOP/BOTTOM	WALL	60	27.3
	A97-60-130V-V1	60	130	1	70	45	60	4	19 x 15 x 24	RIGHT	LEFT	19" or 23" RACK/WALL/FLOOR	130	59.1
	A97-60-130V-V3	60	130	3	70	28	50	4	483 x 381 x 610 mm	RIGHT	LEFT		130	59.1

INPUT

- **Input Voltage Range**
  185-264VAC
- **Input Frequency Range**
  45-66Hz
- **Power Factor**
  Power factor correction circuitry corrects the input power factor to 0.99 at full-load.

OUTPUT

- **DC Output**
  DC Amps: 20 to 150 amperes
  DC Volts: 48 & 130VDC
- **Regulation**
  Dynamic response (with battery). Maximum voltage transient will not exceed ±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 ±0.5% of the setting from no load to full load over the specified input voltage, and ambient temperature ranges.
- **Current Limit**
  Maximum output current limited at 105% of its rated value.

FILTERING

- **Ripple Voltage**
  With Battery Connected
  < 30 mV RMS

  Without Battery Connected
  < 45 mV RMS
- **Electromagnetic Interference (EMI)**
  EMI (conducted or radiated) rated in accordance with FCC Part 15. Class "A" limits.

ENVIRONMENTAL

- **Operating Temperature**
  0°C (32°F) to 50°C (130°F)
- **Storage Temperature**
  -40°C (-40°F) to 85°C (185°F)
- **Humidity**
  0% to 95% relative humidity, non-condensing

PROTECTION

- **Walk-In Circuit**
  Output voltage will gradually increase after the charger is turned on, eliminating surges and over-shoot.
- **High Voltage Shutdown**
  Included
- **AC Breaker**
  Single Phase
  2-pole circuit breaker.

  Three Phase
  3-pole circuit breaker.
- **DC Breaker**
  2-pole circuit breaker.

ADDITIONAL

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

CONTROLS

- **Float/Equalize Switch**
  Rectifier may be equalized locally via front panel switch.
- **Float Voltage**
  48V Adjustable From 50.8-54V
  130V Adjustable From 120-135V
- **Equalize Voltage**
  48V Adjustable From 54-58V
  130V Adjustable From 130-144V

COMBINATION ALARM PACKAGE (STANDARD)

Shown Above A97 Display

LED Indicators

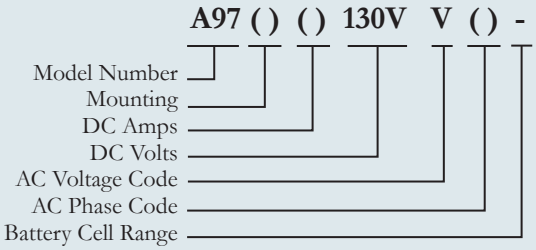
- Fan Failure
- AC Failure
- Over-Temperature
- HVSD
- AC Available
- Current Limit
- Thermal Control
- DC Amps
- DC Volts
- Float
- Equalize
- Positive and Negative Ground

Relay Contacts 2 Form "C"

- HVSD
- Low DCA
- High DCV
- Low DCV
- AC Power Failure
- Summary
- Positive Ground*
- Negative Ground*

* 1 Set Form "C"

Model Number Nomenclature



AC Phase Codes
1 - Single Phase
3 - Three Phase

DC Voltage
48V
130V

Battery Cell Range
Factory set at
60L or 92NC
24L or 37NC