



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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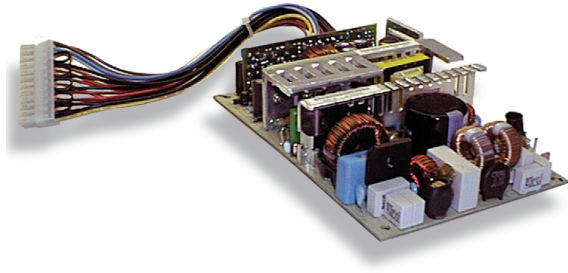
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# 120 Watts AA20140 Series

**Total Power:** 70-120 Watts  
**Input Voltage:** 85-264 VAC  
**# of Outputs:** Quad



## Special Features

- Active power factor correction
- EN61000-3-2 compliance
- Remote sense on outputs one and two
- Industry-standard 4.25" x 7" footprint
- Adjustable main outputs
- Built-in Class B EMI filter
- Overvoltage protection
- Overload protection
- Thermal overload protection

## Environmental

Operating temperature: 0° to 50°C ambient; derate each output at 2.5% per degree from 50° to 70°C

Electromagnetic susceptibility: Designed to meet EN61000-4, -2, -3, -4, -5, -6, Level 3

Humidity: Operating; non-condensing  
20% to 90%

Vibration: 5-32 Hz sinewave .02" double amplitude  
32-2 kHz sinewave 1 G peak

Storage temperature: -40° to 85°C

Temperature coefficient: ±.04% per °C

MTBF per mil std 217E: >200,000 hours at full load and 30°C ambient conditions and full load

## Electrical Specs

### Input

Input range 90-264 VAC  
 Frequency 47-63 Hz  
 Inrush current 40 A max., cold start @ 25°C  
 Efficiency 65% typical at full load  
 EMI filter FCC Class B conducted and radiated, CISPR 22 Class B conducted and radiated, EN55022 Class B conducted and radiated, VDE 0878 PT3 Class B conducted and radiated.  
 Power factor 0.99 typical

Safety ground  
 Leakage current <2 mA @ 50/60 Hz, 254 VAC input

### Output

Maximum power 70 W convection; 120 W with 30 CFM forced air  
 Adjustment range ±5% minimum on 3.3 V and 5 V outputs  
 Hold-up time 15 ms @ 120 W load, 115 VAC input  
 Overload protection Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating  
 Overvoltage protection 3.3 V output: 4.25 V ±.25 V  
 5 V output: 6.25 V ±.75 V, 20-35% above nominal output. Latching type recycle AC to reset.  
 Remote sense Compensates for 0.5 V lead drop min. Will operate without remote sense connected.

## Safety

<b>TUV</b>	EN60950	9837006
<b>UL</b>	UL1950	E186249
<b>CUL</b>	CSA 22.2-234 Level 3	E186249
<b>CB</b>	Certificate and report	DE2-002056
<b>CE</b>	Mark (LVD)	

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## Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
AA20140	+3.3 V	0 A	8 A	16 A	18 A	±2%	50 mV
	+5 V	1 A	10 A	20 A	22 A	±3%	50 mV
	+12 V	0.2 A	1 A	2 A	3 A	±5%	120 mV
	-12 V	0 A	0.5 A	0.5 A	1 A	±10%	120 mV

1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20 MHz bandwidth and 10 μF in parallel with a 0.1 μF capacitor at rated line voltage and load ranges.
4. Minimum loads are required.

## Pin Assignments

### Connector

SK1	PIN 1	Neutral
	PIN 3	Live

SK2	PIN 1-10	Common
	PIN 11	+5 Sense
	PIN 12	+3.3 V Sense
	PIN 13	+12 V
	PIN 14-17	5 V
	PIN 18-22	3.3 V
	PIN 23	Return Sense
	PIN 24	-12 V

### Mating Connectors

(SK1) AC Input: Molex: 09-50-8031 (USA)  
 Molex: 09-91-03500 (UK)  
 PINS: 08-58-0111

(SK2) DC Output: Molex: Right angle  
 39-30-1240 or  
 39-29-1248  
 or  
 Vertical  
 39-28-1243

Astec Connector Kit #70-841-013, includes all of the above.

### Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance ±.02".
3. Warranty: 1 year
4. Weight: 1.38 lb. / .63 kg

