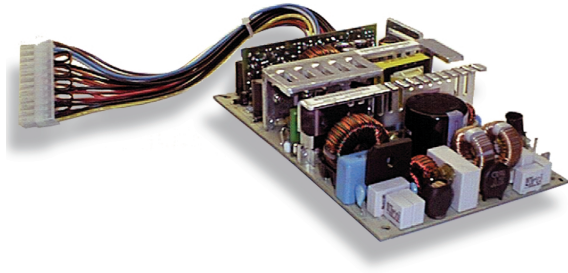


# 120 Watts AA20140 Series

**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

