



AXIOM POWER CORP.

**MODEL: PS72FS24 / PS72HS24
PS72FS30 / PS72HS30**

SPECIFICATION

72W POWER SUPPLY, AC INPUT

21V ~30V DC, 3A MAX OUTPUT

PREPARED BY	DATE	DOCUMENT NO.	SHEET	OF	REV
	8/03/11		1	4	X4

SCOPE:

This specification describes performance and characteristic of AXIOM POWER CORP model number: PS72FS24, PS72FS30, PS72HS24, PS72HS30

1.0 INPUT CHARACTERISTICS;

- 1.1 Input Voltage: FS series: 100~240Vac \pm 10%; HS series: 100~277Vac \pm 10%
- 1.2 Input Current: 1.4A maximum at any input voltage range at maximum load condition
- 1.3 Inrush current: AC inrush current less than 20 A at 110V input and less than 40 A at 220V input

2.0 OUTPUT CHARACTERISTICS;

2.1 Power Output:

Model	Nominal Voltage Range	Current (A)		
		Minimum	Rated	Maximum
PS72FS24	+ 21V ~30V	0.0	3.0	3.2
PS72FS30	+ 21V ~30V	0.0	3.0	3.2
PS72FS24	+ 21V ~30V	0.0	3.0	3.2
PS72HS30	+ 21V ~30V	0.0	3.0	3.2

2.2 Combined Load/Line Regulation:

Model	Nominal Voltage	Current (A) Minimum	Output Maximum	Voltage	
				Regulation	Tolerance
PS72FS24/PS72HS24	+24.0V	0.0	full rated o/p	+/- 3%	+/- 3%
PS72FS30/PS72HS30	+30.0V	0.0	full rated o/p	+/- 3%	+/- 3%

2.3 Ripple and Noise:

The ripple and noise is as follows when measured with maximum bandwidth of 20Mhz and 4.7uF/50V cross connected at output wire shall be less than 200mV

2.4 Temperature Coefficient:

0.1% per degree C maximum

2.5 efficiency:

85% minimum at 120VAC maximum load

2.6 Overshoot:

3% maximum at power turn on or turn off

3.0 PROTECTION SPECIFICATIONS;

3.1 Over Current Protection: Three factory preset options

Option 1: Output shall shut down between 100% to 120% of the rated output current and automatic restart (Hiccup mode, this is the factory default setting)

Option 2: Output shall shut down between 100% to 120% of the rated output current and latched off. To reset the latch, AC input power needs to be recycled. (Latch mode)

Option 3: Output shall go into constant current regulation between 100% to 120% of rated output current. (constant mode) and will go into hiccup mode when the output voltage is forced to go below 7V.

3.2 Short circuit protection:

Option 1: For Hiccup mode and constant current mode over-current setting, output shall shut down and automatic restart (this is the factory default setting)

Option 2: For latch mode over-current setting, output shall shut down and latched off. To reset the latch, AC input power needs to be recycled.

3.3 Over Voltage Protection:

Power supply shall shut down and latched off in the event of output voltage exceed 33V. To reset the latch, AC input power needs to be recycled.

3.4 Over Temperature Protection:

Power supply shall shut down and stay off in the event of out of spec high temperature application of the power. Once power supply shot down, it will stay "off" until power supply chassis temperature drop below 50°C, and power supply will turn back on automatically.

4.0 MECHANICAL SPECIFICATIONS;

4.1 Physical Dimension:

The power supply is a enclosed and potted with metal enclosure

Size: Approx. 5.6"(L) X 1.7" (W) X 1.6" (H)

Mounting dimensions: 4 mounting holes, 0.8" X 6"

4.2 Input cable: 6" ,18WG wires, White (Neutral), Black (Line), Green (Chassis)

4.3 Output cable: 6" ,18WG wires, Red (Positive+), Blue(Negative-)

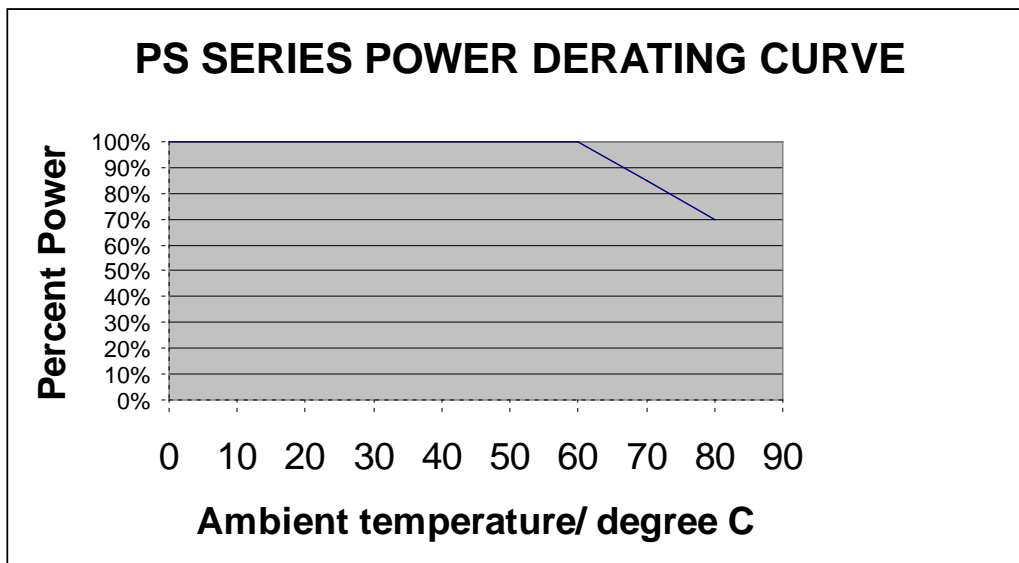
5.0 ENVIRONMENTAL SPECIFICATIONS;

5.1 Cooling Requirement:

Natural air convection cooling

Operating Temperature: nominal -40 to +60°C ambient at full load

Linearly de-rate output power to 70% up to 80°C



5.2 Storage Temperature: -40 to 85° C

5.3 Operating Humidity: 5% to 100%, non-condensing

5.4 Storage Humidity: 5% to 95%

5.5 Vibration:

Frequency 5 to 50 Hz
Acceleration ± 7.35 M/(S*S)
Direction X,Y and Z Axis

6.0 RELIABILITY

6.1 Mean Time Between Failure (MTBF)
>100,000 hours, MIL-HDBK217E at 25 degrees C.

7.0 SAFETY AND EMI SPECIFICATIONS;

7.1 Safety Standard:
Power supply is designed to meet the standards- UL1310, E309404, and E317209.

7.2 EMI standard:
Meet FCC Part 15 Class B, CISPR22.2 Class B

8.0 Part number ordering system:

PS72FS24-C24V3A:

PS[Power Supply]72[72Watt]FS[Full range Single output]24[24Volt series]-C24V3A[Constant current limit set for 24V,3A output].

PS72FS30-H30V2A:

PS[Power Supply]72[72Watt]FS[Full range Single output]30[30Volt series]-H30V2.4A[Hiccup current limit set for 30V,2.4A output].

PS72HS24-L24V3A:

PS[Power Supply]72[72Watt]HS[High range Single output]24[24Volt series]-L24V3A[Latching current limit set for 24V,3A output].

PS72HS24-C24V3A:

PS[Power Supply]72[72Watt]HS[High range Single output]24[24Volt series]-C24V3A[Constant current limit set for 24V,3A output].

It is important to specify the -XXXVXAX number at the end of our UL part number to ensure the proper operation characteristic of the power supply. Our power supply have the ability to set into either a constant current output or a latching current limit output, and we can preset voltage in a range from 21 to 30V for the 24V series in the factory.

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