

# PSA-45

60WATT\* OPEN FRAME SWITCHING POWER SUPPLY



**Dimensions**

Length: 127mm (5.0in.)  
 Height: 30mm (1.2in)  
 Width: 76.2mm (3.0in)  
 Weight: 0.27kgm (0.87lb)

\*Rated at 20CFM air flow cooling

MODEL	DC OUTPUT VOLTAGE	LOAD			
		Min.	Convection	20cfm	Peak**
PSA-45-033*	+3.3V	0A	9A	10A	10A
PSA-45-050	+5V	0A	8A	10A	10A
PSA-45-120	+12V	0A	4A	5A	5A
PSA-45-150*	+15V	0A	3A	4A	4A
PSA-45-240	+24V	0A	2A	2.5A	2.5A

PSA-4525*	+5V	0A	3A	4A	4A
	+24V	0A	1.25A	1.5A	1.5A

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PSA-4531	+5V	0A	4A	5A	7A
	+12V	0A	1.5A	2.5A	4A
	-12V	0A	0.5A	0.5A	1A

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PSA-4534	+5V	0A	4A	5A	7A
	+15V	0A	1.2A	2A	3A
	-15V	0A	0.5A	0.5A	1A

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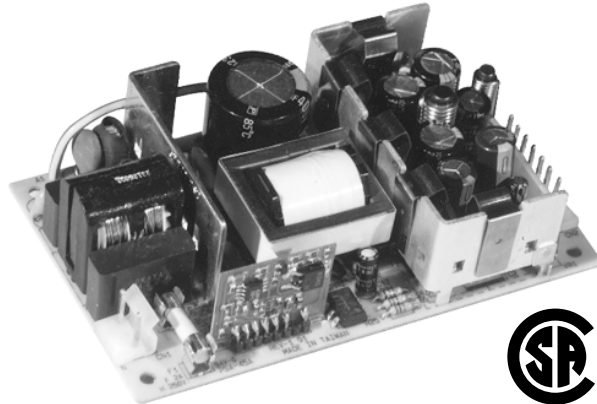
PSA-4541	+5V	0A	3A	5A	7A
	+12V	0A	2A	2A	4A
	-12V	0A	0.5A	0.5A	1A
	-5V	0A	0.5A	0.5A	1A

*\*Note: Special order items. Minimum order quantity of 500 pieces is required.*

*\*\*Peak output of less than 30 seconds; total peak power not to exceed 60W.*



# 60W\* Universal Class B EMI Series PSA45 Series One to Four Output 3x5 Power Supplies



\*60W rated at 20CFM air flow cooling

## Features

- Industrial
- Zero Minimum Loads
- Surface Mount Controller
- ISO 9001 Quality System
- Extended Design Life

## Applications

- Networking
- Peripherals and Terminals
- Mini-Microcomputers

## Safety Approvals

- UL 1950
- CSA 22.2 234
- TUV IEC 950
- CE (Low Voltage Directive)

## Mechanical Characteristics

- Dimensions:
- Length: 127mm (5.0in.)
  - Width: 76.2mm (3.0in)
  - Height: 30mm (1.2in)
  - Weight: 0.27kgm (0.87lb)

## Output Specifications

Model	DC Output Voltage	Load				Ripple (1)	Total(2)
		Min.	Convection	20cfm	Peak(3)	P-P	Regulation
PSA45-033	+3.3V	0A	9A	10A	10A	50 mV	±2%
PSA45-050	+5V	0A	8A	10A	10A	50mV	±2%
PSA45-120	+12V	0A	4A	5A	5A	120mV	±2%
PSA45-150	+15V	0A	3A	4A	4A	150mV	±2%
PSA45-240	+24V	0A	2A	2.5A	2.5A	240mV	±2%
PSA4525	+5V(V1)	0A	3A	4A	4A	50mV	±2%
	+24V(V2)	0A	1.25A	1.5A	1.5A	240mV	±5%
PSA4531	+5V(V1)	0A	4A	5A	7A	50mV	±2%
	+12V(V2)	0A	1.5A	2.5A	4A	120mV	±5%
	-12V(V3)	0A	0.5A	0.5A	1A	120mV	±5%
PSA4534	+5V(V1)	0A	4A	5A	7A	50mV	±2%
	+15V(V2)	0A	1.2A	2A	3A	150mV	±5%
	-15V(V3)	0A	0.5A	0.5A	1A	150mV	±5%
PSA4541	+5V(V1)	0A	3A	5A	7A	50mV	±2%
	+12V(V2)	0A	2A	2A	4A	120mV	±5%
	-12V(V3)	0A	0.5A	0.5A	1A	120mV	±5%
	-5V(V4)	0A	0.5A	0.5A	1A	50mV	±5%

(1) Measured at 45W by using a 12in. twisted pair terminated with a 10mfd capacitor and a 0.1mfd ceramic in parallel.

(2) See reverse for exact tolerances; may deviate during peak loading conditions.

(3) Peak output of less than 30 seconds; total peak power not to exceed 60W.

## PSA45 Characteristics

# POWER SUPPLY

### AC Input Voltage

90-264VAC

### AC Input Frequency

47 to 63Hz

### AC Input Current

1A rms (120VAC)

0.5A rms (240VAC)

### AC Inrush Current (Cold Start)

20A max., at 120VAC, 45W

40A max., at 240VAC, 45W

### Leakage Current

Less than 3.5mA (254VAC)

### Efficiency

70% @ 45W 120VAC, 60Hz

### Regulation (Line)

V1  $\pm 2\%$ ; V2-4  $\pm 2\%$

### Regulation (Load or Cross)

V1  $\pm 2\%$ ; V2-4  $\pm 5\%$

(Measured output at 20%-100% load; other outputs at 60% of load)

### Hold-up Time

12msec. 45W load, 120VAC

### Switching Frequency

50KHz, typical

### Overvoltage Protection

Crowbar, V1 only;

### Overcurrent Protection

Short circuit, AutoRestart

### Operation Temperature

0 to 50°C, derated to 50% at 70°C

### Storage Temperature

-25°C to +85°C

### MTBF

Full Load, 25°C

Greater than 100,000 hours,  
(MIL-HDBK-217F)

### EMI

FCC Class B

EN55022B

### Immunity

EN 50082-1: 1997

61000-4-2, Level 3

61000-4-3, Level 2

61000-4-4, Level 2

61000-4-5, Level 3

61000-4-6, Level 2

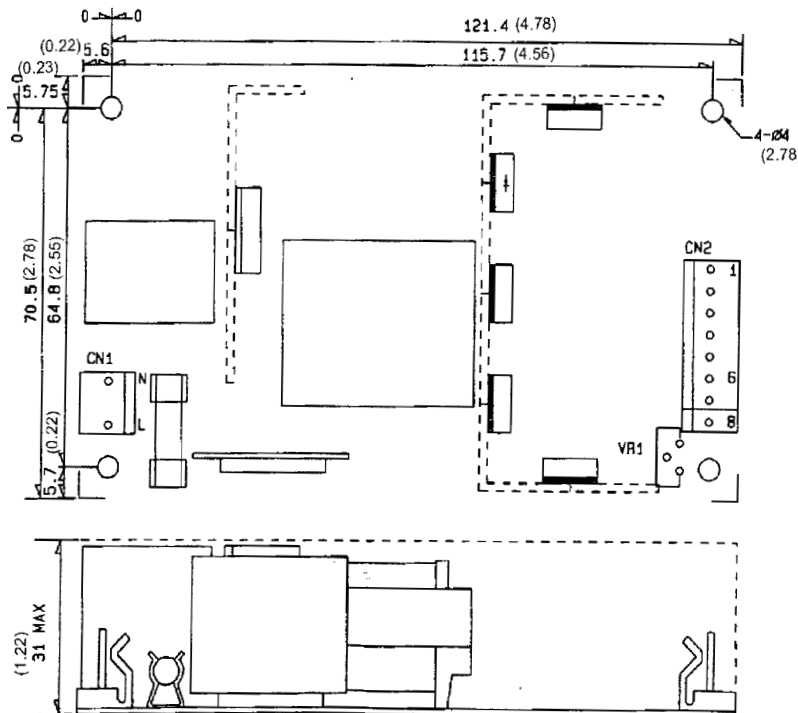
61000-4-11

### Mating Connectors

AC: Molex 09-50-3031

DC: Molex 09-50-3061  
or 3081 (Quad only)

## Dimension Diagram Unit: mm (inch)



### For Single Output:

Connector	Pin	Signal
CN1	1	L
	2	N
CN2	1	+V
	2	+V
	3	+V
	4	GND
	5	GND
	6	GND

### For Multiple Outputs:

Connector	Pin	Signal
CN1	1	L
	2	N
CN2	1	V <sub>2</sub>
	2	V <sub>1</sub>
	3	V <sub>1</sub>
	4	GND
	5	GND
	6	V <sub>3</sub>
	7	V <sub>4</sub> GND
	8	V <sub>4</sub>