

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 |

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

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

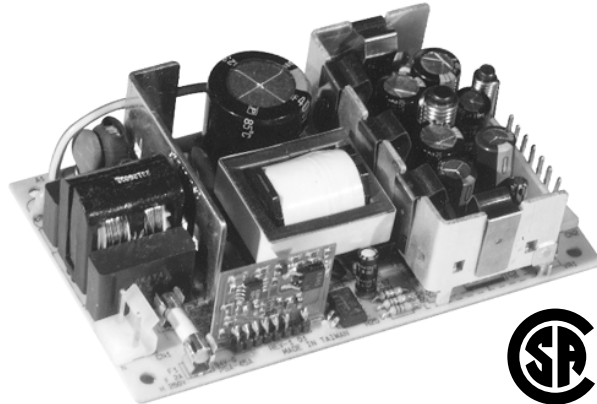
| | | | | | |
|----------|------|----|------|------|----|
| PSA-4541 | +5V | 0A | 3A | 5A | 7A |
| | +12V | 0A | 2A | 2A | 4A |
| | -12V | 0A | 0.5A | 0.5A | 1A |
| | -5V | 0A | 0.5A | 0.5A | 1A |

**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

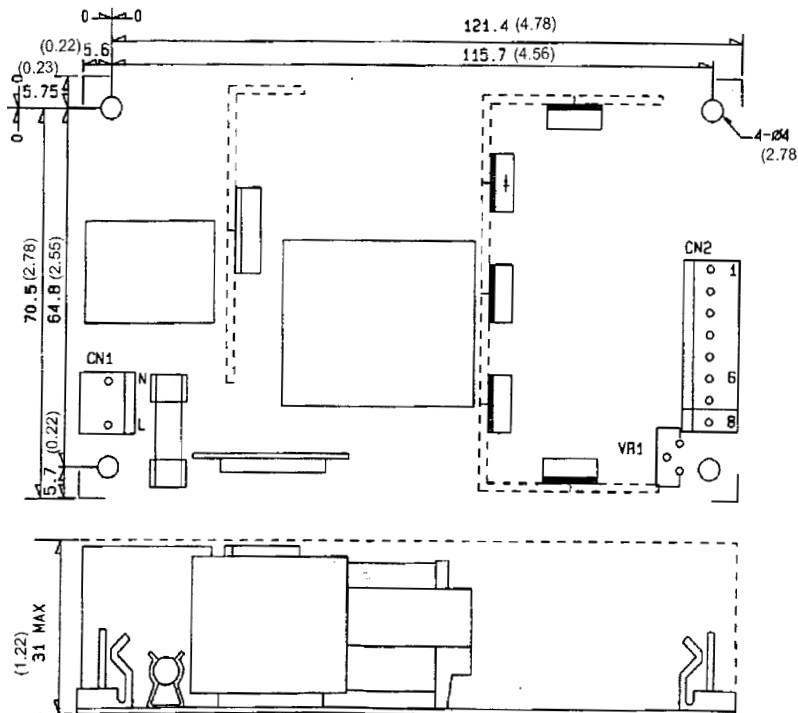
61000-4-11

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 ₂ |
| | 2 | V ₁ |
| | 3 | V ₁ |
| | 4 | GND |
| | 5 | GND |
| | 6 | V ₃ |
| | 7 | V ₄ GND |
| | 8 | V ₄ |