

SMD175-36 Medical Power Supply 150 to 175 Watts

| | |
|----------------------------|----------------------|
| Max. Output Power | 200 watts |
| Output Channels | Single Output |
| Input Mains Voltage | 85 to 264VAC |



STANDARD FEATURES

- Over voltage, over current & over temperature protection
- Compact size 4.5"W x 7.0"L x 1.7"H
- Power factor corrected to 0.99pf
- 12 volt Vdc, 250 mA fan output
- Medical Approved to UL2601, IEC601-1 and CSA 22.2 No. 601.1

ENVIRONMENTAL

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

Storage temperature: -40°C to 85°C

Temperature coefficient: ± 0.03% per °C

EMI compliance to CISPR 11 Class B

Humidity: Operating; non-condensing 0% to 95%

MTBF calculated >296,000 hours at full load 25°C ambient conditions per MIL-HDBK-217F, Notice 2

ELECTRICAL SPECIFICATIONS

Input

Input range85 to 264VAC
 Frequency47 to 63Hz
 Leakage currentLess than 135µA @132VAC and maximum 270µA @264VAC. Lower leakage models optional. Contact factory for option code
 Inrush current37A maximum @ 240VAC under cold start @ 25°C
 Efficiency75% typical at full load
 EMI filterCISPR 11 Class "B", FCC Class "B", EN55011 Class B
 Power factor0.99 typical

Output

Maximum power.....175 watts with 150 LFM min. of customer provided cooling. 200 watts max. with optional fan cover (suffix "-C").
 Hold-up time.....20 ms @ 200 W load, nominal line (115VAC)
 Overload protectionFully protected against short circuit and output overload. Automatic recovery
 Overvoltage protection10% to 25% above nominal output

Logic Control

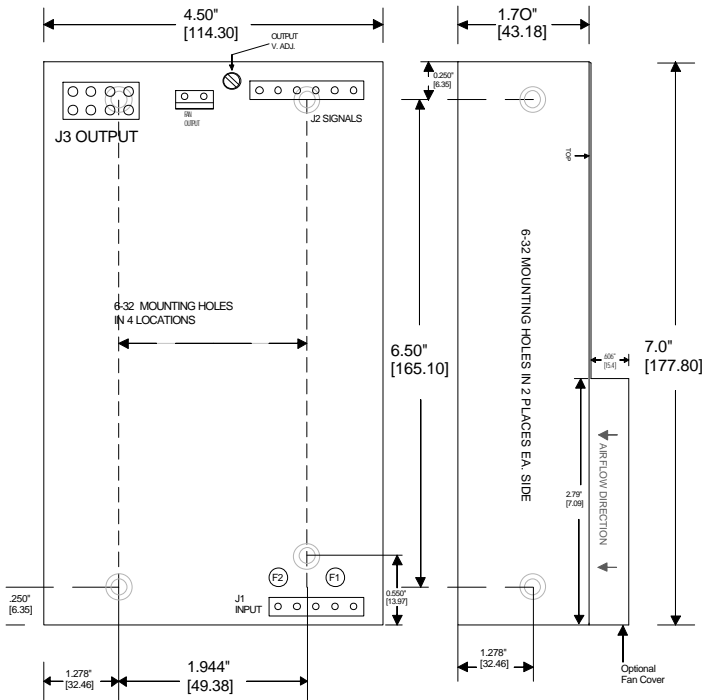
Power failureTTL active high, goes low 5 msec before loss of regulation
 External/off A logic low shuts down the power converter
 DC OKDC
 OKTTL active high @ 90%of output regulation.
 Remote senseCompensates for 0.5 V lead drop min. Will operate without remote sense connected.

EAGLE SERIES ORDERING INFORMATION

| Model Number | Output Voltage | Maximum Current ¹ | Maximum Current ² | Typical Regulation | Ripple P/P (PARD) ³ | Voltage Adjust |
|--------------|----------------|------------------------------|------------------------------|--------------------|--------------------------------|----------------|
| SMD175-12 | 12V | 16.50A | 12.5A | ± 1% | 120 mV | ± 5% |
| SMD175-15 | 15V | 13.3A | 10A | ± 1% | 150 mV | ± 5% |
| SMD175-24 | 24V | 8.3A | 6.2A | ± 1% | 240 mV | ± 5% |
| SMD175-28 | 28V | 7.2A | 5.3A | ± 1% | 280 mV | ± 5% |
| SMD175-30 | 30V | 6.6A | 5.0A | ± 1% | 300 mV | ± 5% |
| SMD175-36 | 36V | 5.5A | 4.2A | ± 1% | 360 mV | ± 5% |
| SMD175-48 | 48V | 4.2A | 3.2A | ± 1% | 480 mV | ± 5% |

1. Maximum continuous rating with 150LFM of directed airflow or with optional fan cover (suffix "-C")
2. Unrestricted convection cooling
3. Measured with 20MHz bandwidth at nominal line full load

MECHANICAL



I/O CONNECTORS

| AC INPUT (J1) MOLEX PCB HEADER p/n 39-30-2056 | |
|---|-------------------|
| PIN # | REFERENCE |
| 1 | AC GROUND |
| 2 | N/C |
| 3 | AC NEUTRAL |
| 4 | N/C |
| 5 | AC LINE |
| MATING CONNECTOR MOLEX P/N | |
| HOUSING 39-01-4051 CONTACTS 39-00-0164 | |
| OUTPUT (J3) MOLEX PCB HEADER p/n 39-29-9085 | |
| PINS | REFERENCE |
| 3,4,7,8 | VOUT + |
| 1,2,5,6 | RETURN |
| MATING CONNECTOR MOLEX P/N | |
| HOUSING 39-01-2080 CONTACTS 39-00-0163 | |
| SIGNALS INTERFACE (J2) AMP 641215-6 | |
| PIN | REFERENCE |
| 1 | INHIBIT |
| 2 | + SENSE |
| 3 | POWER GOOD |
| 4 | - SENSE |
| 5 | COMMON |
| 6 | POWER FAIL |
| MATING CONNECTOR AMP P/N | |
| HOUSING 770602-6 CONTACTS 770666-6 | |
| FAN CONNECTOR (J4) AMP 641215-2 | |
| PIN | REFERENCE |
| 1 | FAN OUTPUT - |
| 2 | FAN OUTPUT +(12V) |
| MATING CONNECTOR AMP P/N | |
| HOUSING 770602-2 CONTACTS 770666-02 | |

NOTES

- a. Other output voltages available upon request. Contact CDI Sales
- b. Specifications subject to change without notice
- c. All dimensions in inches, tolerance is ±.02"
- d. Specifications are at factory settings
- e. Mounting maximum insertion depth is 0.12"
- f. Warranty: 1 year