

CENT1120

Universal 120 Watt Series



ITE Switch-Mode Power Supply

3 Year Warranty

- Universal Input 100Vac – 240Vac
- Single Output Models up to 120W
- Desktop Style/Non-vented case
- Efficiency Level IV
- Power Factor Correction
- Certified to UL/ EN60950
- IPX1 Rated Enclosure
- Complies with EMI/RFI Regulations
- Modified and Custom Designs Available



International Safety Standard Approvals



Specifications

| | | | |
|------------------------------------|--|----------------------------|--|
| AC Input | 90-264Vac, 47-63 Hz single phase | MTBF | > 100K hours (calculated, 25°C at full load) |
| Input Current | 90VAC: 2A, 180VAC: 1.0A | Hold-up Time | 16.7 ms min. @ 110VAC |
| Inrush Current | Inrush Current Protection Provided | Overvoltage Protection | Latching |
| Input Fuse | Internal Primary Current Fuse Provided | Overload Protection | >120% of full rated load, Hiccup Mode |
| Earth Leakage Current | Input-GND: <3.5mA, Normal State Output-GND: <0.25mA, Normal State | Short Circuit Protection | Hiccup Mode, auto-recovery |
| Efficiency | 88% typical | Overtemperature Protection | Latching |
| No Load Power | <0.5W | Output Voltage | See chart |
| Input Harmonics | Meets IEC61000-3-2, class D | Safety Standards | IEC/EN/UL60950 |
| Transient Response | 5ms return to within 1%, 50% load step. 0.2A/sec slew rate. Maximum deviation is 5% | Topology | Two-Stage Conversion and Quasi-Resonant Flyback |
| Line/ Load Voltage Regulation | Line: +/-2.0% max., Load: +/-5% max | Isolation | Input-Output: 3000VAC, Input-GND: 1500VAC, Output-GND: 500VDC |
| Minimum Load | Not required | Operating Temperature | 0° to 40°C with no derating |
| Ripple and Noise | 1% pk-pk max., 20MHz BW, differential mode | Temperature Coefficient | 0.3% per °C, maximum |
| Turn-on Time | 3 sec. maximum @ 115VAC | Storage Temperature | -20°C to +85°C |
| Case Material | Black 94V-0 rated Polycarbonate | Relative Humidity | 5% to 95%, non-condensing |
| Case Dimensions/Output Connections | See chart and outline drawing | Altitude | 0 to 10,000 ft, operating; -500 to 40,000 ft, non-operating |

Model Number Key

CENT 1 120 A VV 51 F 01

| | |
|-------------------|--|
| Model | "01" = Standard. "02" and higher indicates a modified model. |
| Input Connector: | "F" = IEC320 C14 grounded, Other options available, see below |
| Output Connector: | "51" = 6 pin Molex. Other options available. |
| Output Voltage: | "09" = 9Vdc, "12" = 12Vdc, "24" = 24Vdc, etc. |
| Model | "A" = Original Configuration |
| Output Power: | "120" = 120 Watts |
| # of Outputs | "1" = Single Output |
| Product Family: | "C" = Commercial/ITE/Industrial, "E" = External, "NT" = New Technology |

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OUTPUT PARAMETERS

| Model Number | Output Volts | Output Current (max) | Max Watts | Ripple (Vp-p max) |
|------------------|--------------|----------------------|-----------|-------------------|
| CENT1120A0951F01 | 9V | 9.00A | 81W | 90mV |
| CENT1120A1251F01 | 12V | 9.17 A | 120W | 120mV |
| CENT1120A1551F01 | 15V | 7.33 A | 120W | 150mV |
| CENT1120A1851F01 | 18V | 6.67 A | 120W | 180mV |
| CENT1120A2451F01 | 24V | 5.00 A | 120W | 240mV |
| CENT1120A4851F01 | 48V | 2.50 A | 120W | 480mV |

Note: Ripple and Noise is measured with 0.1µF ceramic and 10µF electrolytic capacitor in parallel, connected at the measurement point.

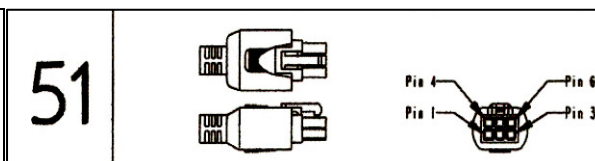
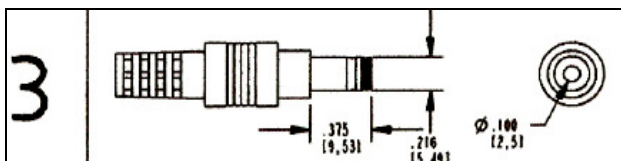
EMI/EMC Compliance

| | |
|---|---|
| Conducted Emissions | EN55022 Class B |
| Radiated Emissions | EN55022 Class B, FCC Part 15, Class B. |
| Static Discharge Immunity | EN61000-4-2, 6kV Contact Discharge, 8kV air discharge |
| Radiated RF Immunity | EN61000-4-3, 3V/m. |
| EFT/Burst Immunity | EN61000-4-4, 2kV/5kHz.. |
| Line Surge Immunity | EN61000-4-5, 1kV differential, 2kV common-mode |
| Conducted RF Immunity | EN61000-4-6, 3Vrms |
| Power Frequency Magnetic Field Immunity | EN61000-4-8, 3A/m, performance criteria A |
| Voltage Dip Immunity | EN61000-4-11, 70% UT for 10mS, 40% UT for 100mS, <5% UT for 5000mS, performance criteria A, B |
| Line Flicker | EN61000-3-3 |
| Line Frequency Harmonics | EN61000-3-2, Class D |

Input Receptacle

Output Connector (12V model)

Output Connector (All other models)

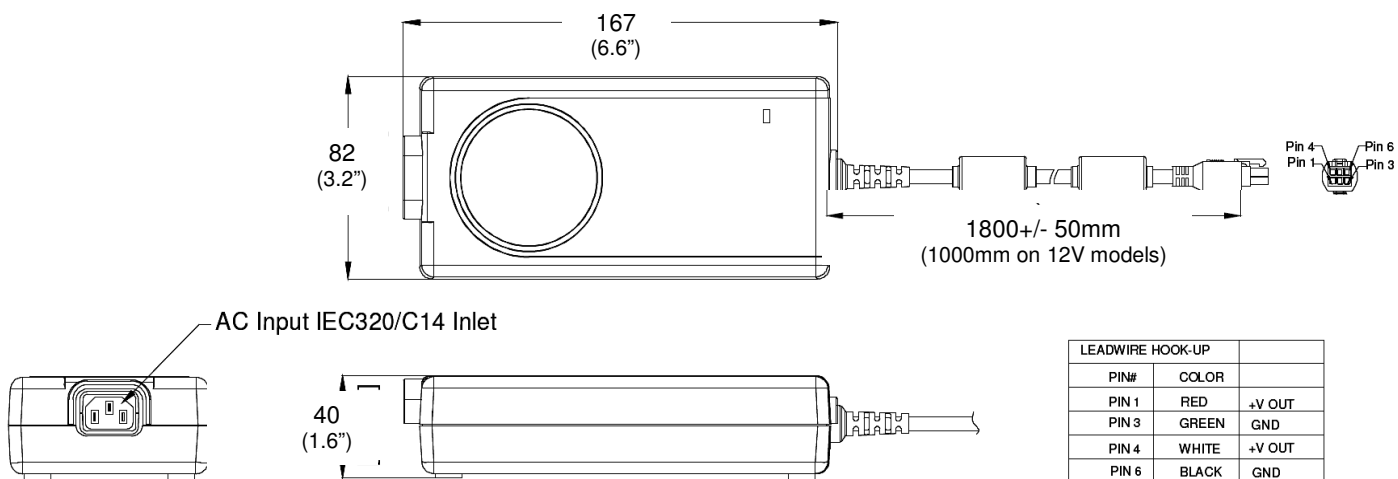


IEC320, C14 – Class I

"#3" Connector is 2.5mm barrel type, center (+)

"#51" Connector is Molex 39-01-2060 or equivalent.

Outline Drawing (#51 connector shown)



| LEADWIRE HOOK-UP | | |
|------------------|-------|--------|
| PIN# | COLOR | |
| PIN 1 | RED | +V OUT |
| PIN 3 | GREEN | GND |
| PIN 4 | WHITE | +V OUT |
| PIN 6 | BLACK | GND |