

# 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<br>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.<br>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,<br>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.

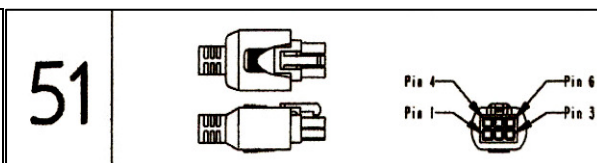
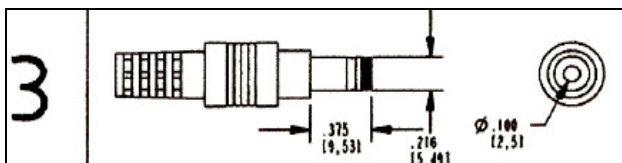
## EMI/EMC Compliance

|   |   |
|---|---|
| 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)

