CHEROKEE INTERNATIONAL

Low Power CCP Series

150 Watt Power Supply

Low Cost - Low Profile - High Density

- 150W Modular Power Supply
- Power Factor & Harmonic Current Corrected
- Single & Multiple Outputs
- 1U High Profile
- Input Power Fail and DC Power Good Signals
- Remote Sense
- Remote ON/OFF Enable/Inhibit
- Meets VDE/FCC Class "B" EMI
- Total Power Overload Limited



Features

Benefits

- PFC Compliant to EN61000-3-2
- Flexibility with option choices
- Supports global use of power supply
- Custom solutions available

Key Market Segments & Applications

- Communications
- Computer Peripheral Applications
- Applications Industrial Applications
- Test Equipment

Medical Instrumentation

| Specifications | Low Power CCP Series - 150 Watt Power Supply |
|---------------------------------------|---|
| Input Voltage range | 85-264VAC AC, 47-63Hz |
| Power Factor | 0.99 at Full Load. Compliant to EN61000-3-2 |
| Inrush Current (Cold Start) | 20A Max @ 115VAC, 35A Max. @ 230VAC |
| Input Current | 2.70A @ Full power and 85VAC |
| Efficiency | 70% typical at 180VAC (measured at full load) |
| Internally Fuse | 4A, 250VAC (5MF Type) |
| Output Power | 150W |
| Output Configuration | See table on page 2 |
| Voltage Adjustment Range | +/- 5% |
| Total Regulation (Line/Load/Cross) | +/- 5% (typical). CCP151 has 2 tightly regulated independent V1 & V2 at +/- 1% (typical) when V4 is +/- 10%. |
| Output Ripple & Noise | +/- 1% (pk-pk) max. at 20MHz bandwidth |
| Transient Response (at 25% step load) | Peak deviation of 3%; Settling time 300µsec typical within 2% of nominal; Slew rate of 2A/µsec |
| Hold Up Time | At full load, low line will remain in regulation for ≥ 20msec after loss of AC input power. |
| Total Power Overload Limit | Set at 200W by sensing primary input current. |
| Over Voltage Protection | V1 on CCP150/V1&V2 on CCP151. Power supply shuts down output exceeds over-voltage set trip point |
| | (116% to 130% of nominal voltage). To reset, cycle input power. |
| Current Limit Protection | Limited by Total Package Power. 1A outputs are limited by monolithic integrated circuit post regular characteristics. |
| Reverse Voltage Protection | All outputs protected up to 100% of the rated output current. |
| Thermal Shutdown | Activated by an over temperature condition. Power cycles ON when fault is removed. |
| DC Good - ("LOW" on Fail) | TTL "HIGH" to "LOW" occurs when Vo is less than 95% of the nominal output voltage setting. |
| Remote Sense | Separate sense terminals will compensate for total line loss of 5%. |
| Remote ON/OFF | LOGIC 1 (TTL High) or open enables unit (ON), LOGIC 0 (TTL Low) or short shuts unit down (OFF). |
| Electromagnetic Compatibility | Radiated and Conducted Noise: EN55022/11, FCC Part 15 Level B |
| | Electrostatic Discharge: EN61000-4-2 Level 3 |
| | RF Field Susceptibility: EN61000-4-3 & ENV50140 Level 3 |
| | Electrical Fast Transient/Bursts: EN61000-4-4 Level 3 |
| | Surge Susceptibility: EN61000-4-5 & ENV50141 Level 3 |
| | Conducted RF Susceptibility: EN61000-4-6 |
| | Radiated Magnetic Susceptibility: EN61000-4-8 |
| Shock & Vibration | Per MIL STD-810E |
| Safety Certifications | UL 1950, CSA 22.2 No. 950 & 234, TUV (EN60950), CE Mark |
| Operating Temperature | 0 to 50°C. |
| Cooling | 25CFM required to obtain 150W power |
| Humidity | Up to 95%, non-condensing |

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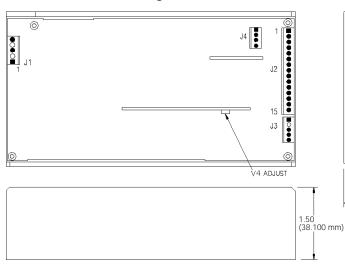
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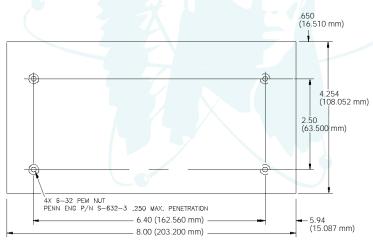
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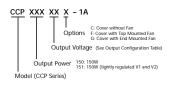
150 Watt Power Supply

CCP151 Outline Drawing





CCP Model Selection Guide



| CCP Output Configurations | | | | | | | | |
|---------------------------|--------------------|---------|-----|---------|-----|---------|-----|---------|
| Model Number | V1 (| Current | V2 | Current | V3 | Current | V4 | Current |
| | Single Output | | | | | | | |
| CCP151E1 | 3.3 | 26 | | | | | | |
| CCP151H1 | 24 | 7 | | | | | | |
| | Multiple Output | | | | | | | |
| CCP150E2 | 3.3 | 30 | | | | | 12 | 2 |
| CCP150K2 | +5.1 | 26 | | | | | 12 | 6 |
| CCP151H3 | +5.1 | 26 | 3.3 | 8 | | | 12 | 6 |
| CCP151H4 | +5.1 | 26 | 3.3 | 8 | 12 | 1 | +12 | 6 |
| CCP150P4 | +5.1 | 26 | 12 | 1 | -12 | 1 | 24 | 3 |
| CCP151S4 | +12 | 3.5 | 5 | 15 | 12 | 1 | 24 | 3 |
| CCP151T4 | 5 | 26 | 3.3 | 8 | -15 | 1 | +15 | 3 |

| CCP Conn | ector Part | Numbers | | | | | |
|----------|------------------------|------------|------------------|---------------|--|--|--|
| | PCB Conne Part Numb | | Mating Connector | | | | |
| J1 | | | | | | | |
| AMP | 640445-5 | | 640426-5 | | | | |
| PANDUIT | HLSS-156-5 | | CE 156F20-5 | | | | |
| J2 | | | | | | | |
| AMP | 1-640445-5 | | 1-640426-5 | | | | |
| PANDUIT | HLSS-156-15 | | CE 156F20-15 | | | | |
| J3 | CCP151 | CCP150 | CCP151 | CCP150 | | | |
| AMP | 640456-5 | 640456-7 | 640440-5 | 640440-7 | | | |
| PANDUIT | HLSS-100-5 | HLSS-100-7 | CE 100F22-5-D | CE 100F22-7-D | | | |
| J4 | | | | | | | |
| AMP | 640456-4 | | 640440-4 | | | | |
| PANDUIT | HLSS-100-4 | | CE 100F22-4-D | | | | |

| Canault faster | for | ath or | autaut | configurations. |
|----------------|---------|--------|--------|-----------------|
| Consult factor | / IOI (| Junei | outbut | Confidurations. |

| Connector Number | Pin Number | Function | | Connector | Pin | Function | |
|---------------------|---------------|------------------|------------------|------------|--------|------------------|------------------|
| | | CCP150 | CCP151 | Number | Number | CCP150 | CCP151 |
| J1 | 1 | LINE | LINE | J2 (cont.) | 12 | -V3 | +V3 FLOATING |
| | 2 | NO PIN | NO PIN | | 13 | +V4 | -V3 FLOATING |
| | 3 | NEUTRAL | NEUTRAL | | 14 | +V4 | +V4 |
| | 4 | NO PIN | NO PIN | | 15 | +V4 | +V4 |
| | 5 | GROUND | GROUND | J3 | 1 | POWER FAIL | POWER FAIL |
| J2 | 1 | +V1 | +V2 | | 2 | RTN (V1, V3, V4) | NO PIN |
| | 2 | +V1 | +V2 | | 3 | -V1 SENSE | RTN (V1, V2, V4) |
| | 3 | +V1 | +V1 | | 4 | +V1 SENSE | REMOTE ON/OFF |
| | 4 | +V1 | +V1 | | 5 | NO PIN | RTN (V1, V2, V4) |
| | 5 | RTN (V1, V3, V4) | +V1 | | 6 | REMOTE ON/OFF | N/A |
| | 6 | RTN (V1, V3, V4) | +V1 | | 7 | RTN (V1, V3, V4) | N/A |
| | 7 | RTN (V1, V3, V4) | RTN (V1, V2, V4) | J4 | 1 | N/A | +V1 SENSE |
| | 8 | RTN (V1, V3, V4) | RTN (V1, V2, V4) | | 2 | N/A | -V1 SENSE |
| | 9 | RTN (V1, V3, V4) | RTN (V1, V2, V4) | | 3 | N/A | +V2 SENSE |
| | 10 | +V2 FLOATING | RTN (V1, V2, V4) | | 4 | N/A | -V2 SENSE |
| | 11 | -V2 FLOATING | RTN (V1, V2, V4) | | | | |

Cherokee reserves the right to make changes to the product described without notice. No liability is assumed as a result of its use nor for any infringement on the rights of others.

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