



KDK ELECTRONICS, INC.
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Saratoga, California 95070

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Model KD250 Power Supply Specification (*PRELIMINARY 2004-08-30*)

AC Input	90-264Vac	47-440Hz single phase	
AC Input Current	3.3A rms (90Vac & 220W)	2.5A rms (115Vac & 220W)	1.3Arms (230Vac & 220W)
Power Factor	0.99 (115Vac & 220W)	0.95 (230Vac & 220W)	
Emissions	Compliant to EN55022 Class B, FCC Class B. Certification pending.		
Power Quality	Compliant to EN 61000-3-2 Class D. Certification pending.		
Immunity	Compliant to EN 55024 Class B. Certification pending.		
Inrush Current	15A (cold start at 25°C)		
Input Protection	Internal AC fuse (dual option available).		
Earth Leakage Current	Less than 1.5mA at 60Hz, 230Vac. 300µA option available.		
Maximum Output Power	250W		
Efficiency	85% @ 250W (115Vac & 25°C)	86% @ 250W (230Vac & 25°C)	
Hold-Up Time	20ms @ 250W (115Vac & 25°C)		
Standby Power (+5VSB)	+5V @ 1.5A maximum. This output is present whenever AC input power is applied and is not affected by the shutdown signal.		
Isolated +12V (+12VIS)	Floating +12V/3A option available. Isolation voltage: 500V.		
Ripple and Noise	+12V & +12VA outputs < 120mV P-P (20MHz BW) +5VSB < 100mV P-P (20MHz BW) +5V & +3.3V outputs < 50mV P-P (20MHz BW)		
Overload Protection	Current foldback, self recovery.		
Power Fail (PF)	During nominal operation, TTL compatible output is high (>4.0V). Output switches low (<0.2V) when any of the +12V, +5V, or +3.3V output voltages falls below its under-voltage threshold.		
Shutdown (SD)	To turn on, apply TTL low. To turn off, apply TTL high.		
Operating Temperature	100% rated power from 0°C to 50°C (baseplate temperature) . Derate linearly from full power at 50°C to half power at 70°C. -40°C option available.		
Storage Temperature	-65°C to 85°C ambient.		
Size (mm)	W x L x H: 103 x 200 x 30 open frame.		
Weight	680g maximum.		
Connectors	ATX compatible. Right angle standard. Vertical mount option available.		
Safety	Compliant to ANSI/UL 60950-1, CSA 22.2-60950-1, EN 60950-1. Certification pending.		
Warranty	1 year		



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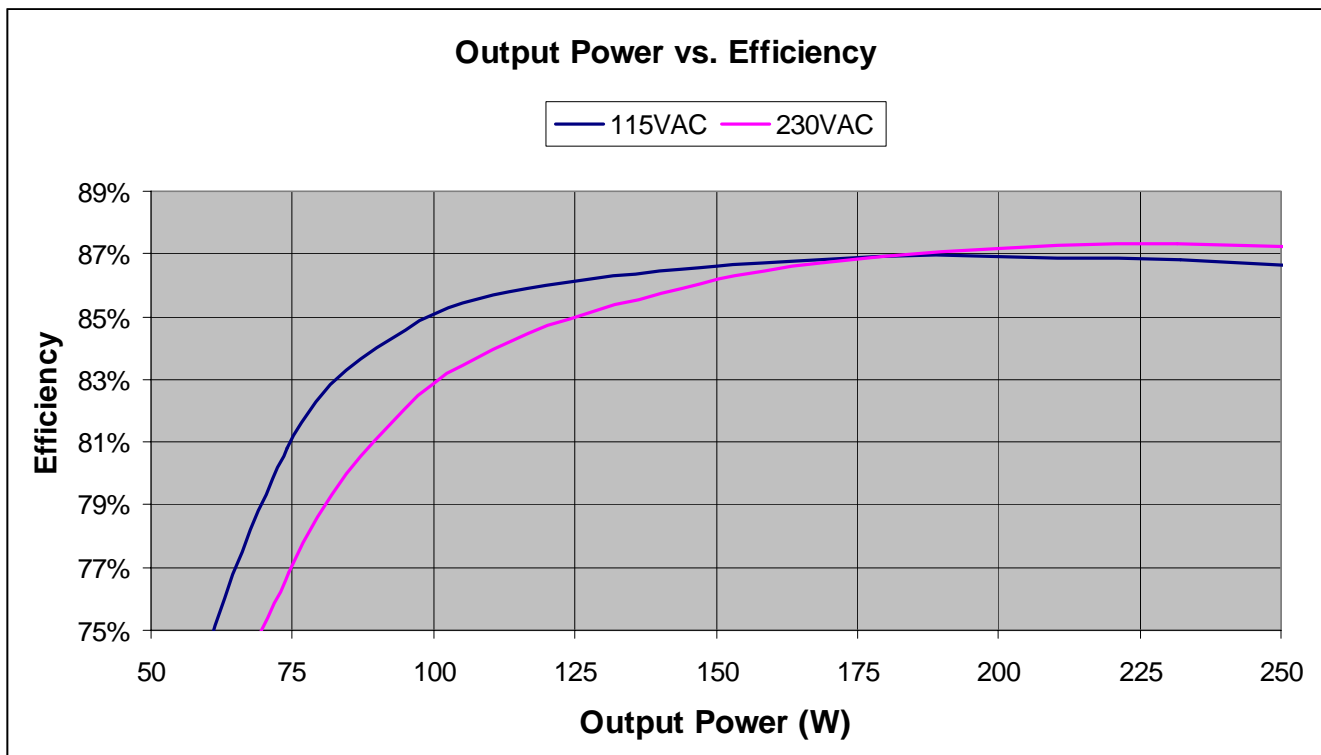
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LOAD & CROSS REGULATION SPECIFICATIONS

Output	Range	Minimum Voltage (V)	Full Load Set Point (V)	Maximum Voltage (V)	Maximum Load (A)	Minimum Load (A)
+3.3V	±5%	3.14	3.30	3.47	10.0	1.0
+5V	±2%	5.00	5.00	5.20	10.0	1.0
+12V	±5%	11.16	12.00	12.84	10.0	1.0
+12VIS	±5%	11.16	12.00	12.84	3.0	0.5
+5VSB	±5%	4.85	5.00	5.35	1.5	0.0

Notes:

1. The +5V load may be adjusted to a higher output level (at the expense of the other output loads) as long as the maximum power rating is not exceeded.
2. Outputs other than those tabulated above are available upon request.
3. When minimum load is not maintained, maximum load regulation range is ±20% on the +12V and +12VIS outputs and ±10% on all other outputs.
4. Outputs may be customized to user specified load requirements for improved load and cross regulation.



Update Summary:

- 2004-05-24 KD250 datasheet release.
- 2004-06-28 Earth leakage current 300µA option added.
- 2004-08-30 Cross regulation and mechanical specifications updated.

This power supply is manufactured under United States patent right of KDK Electronics, Inc.

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DWG. NO. KD250

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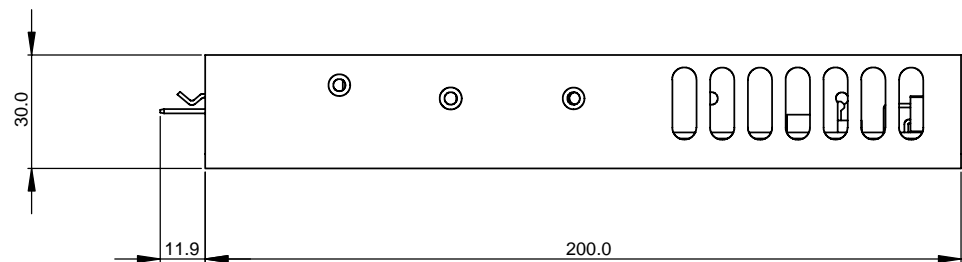
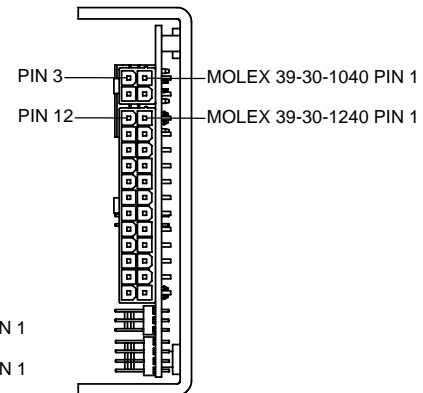
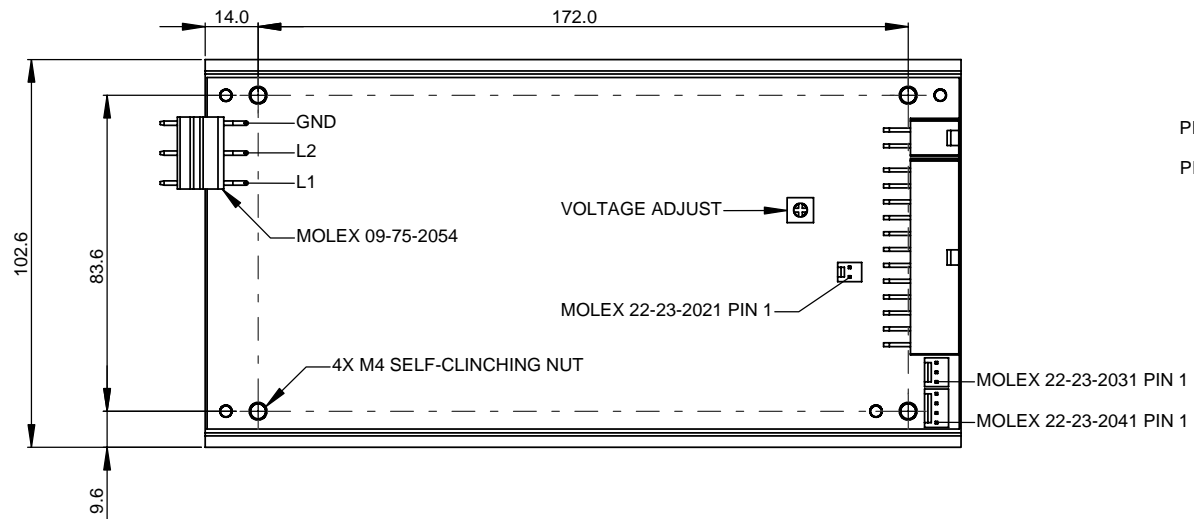
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REVISIONS

REV	DESCRIPTION	BY	CHK	ECO	DATE (yyyymmdd)	APPROVED



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UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS. TOLERANCES: DEC. X ±.050 FRACTION ±.104 XX ±.020 ANG ±1° XXX ±.025 SURF ±.4° DO NOT SCALE DRAWING		CONTRACT NO. N/A			
KDK ELECTRONICS, INC. 15520 On Orbit Drive Saratoga, CA 95070 U.S.A. Tel: (408) 741-1347 Fax: (650) 571-5123 www.kdk.cnodst.com		APPROVALS			
DRAWN BY 姜宇赫		2004-08-27		OUTLINE DRAWING	
PROC. ENG.					
MFG. ENG.					
QA					
SCALE 1:1		CLASS CODE N/A		SHEET 1 OF 1	

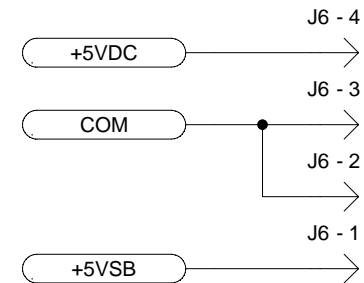
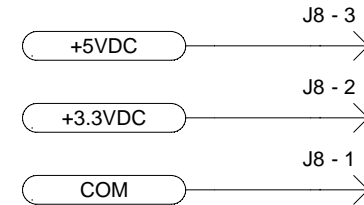
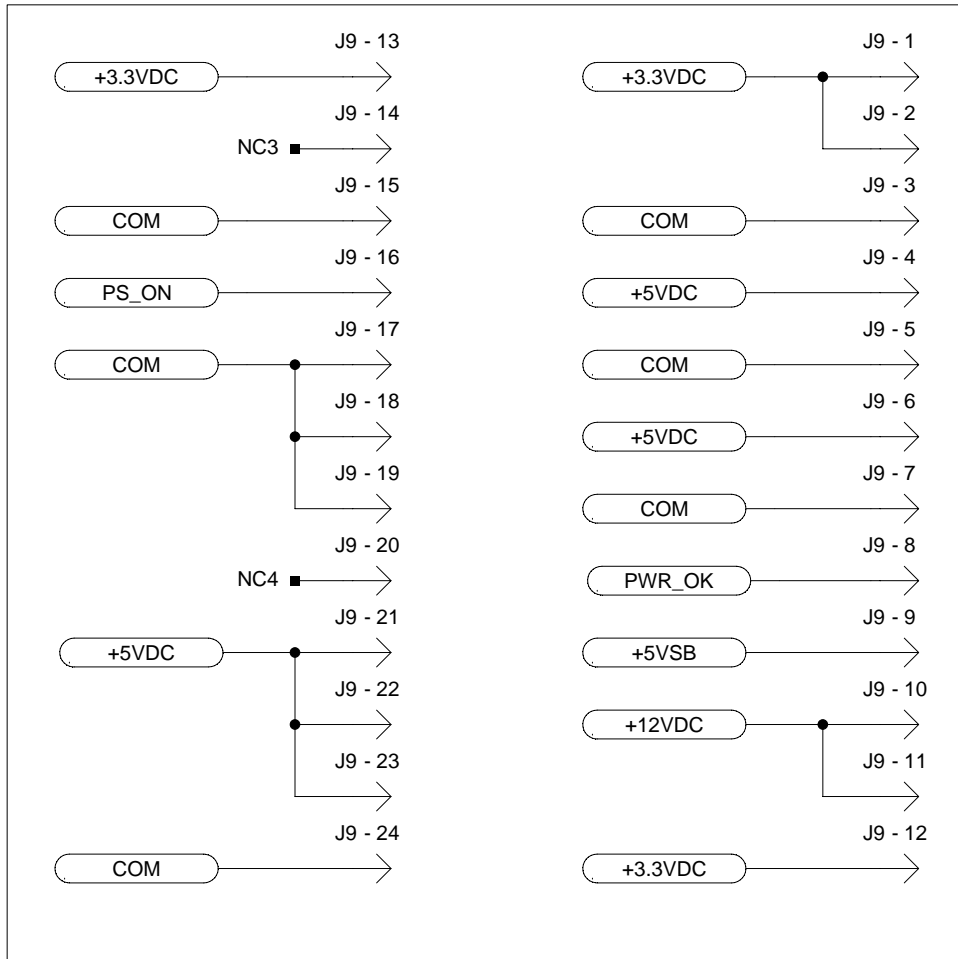
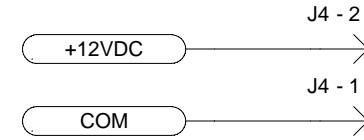
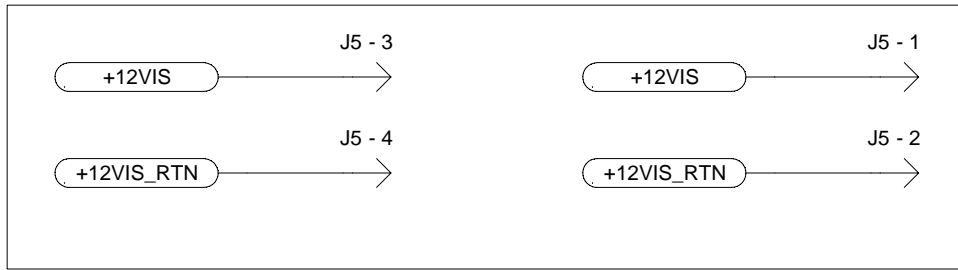
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DRAFTER KDK		DATE 2004-07-31	TITLE SCHEMATIC OUTPUT CONNECTORS			
ENGINEERING KDK		DATE 2004-09-11	DRAWING NUMBER KD250		REVISION X1	
MANUFACTURING	DATE	SIZE A	CAGE CODE	DIST CODE	SHEET 8 OF 8	
ENGINEERING CODE		SCALE 1/1	SHEET 8 OF 8			