

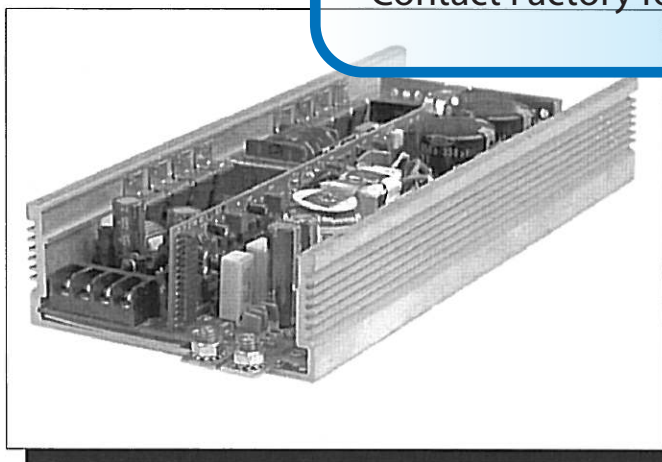


**Murata Power Solutions**

# 750 WATT AC/DC POWER SUPPLY

## KX750 OBSOLETE PRODUCT

Contact Factory for Replacement Model  
**DESCRIPTION**



The KX750 is a low-profile, 750 watt, power factor corrected, triple output power supply utilizing a half-bridge topology operating at 250kHz. The compact design yields a power density in excess of 6 watts per cubic inch. Universal input and power factor correction to EN61000-3-2 make the KX750 an excellent choice for product applications with worldwide markets. In addition, the KX750 carries UL, CSA and TUV approvals, and complies with FCC and VDE Class B EMI requirements. Optional active current sharing on all three outputs simplifies N+1 redundant applications. Remote sensing capability is standard on all outputs and will compensate for up to 0.7V line drop. All outputs are fully isolated, regulated, and current limited.

## FEATURES

- Active Power Factor Correction to EN61000-3-2
- 3.3V Main Output
- FCC/VDE Class B EMI Filter
- Active Current Sharing Optional
- Fully Isolated and Regulated Outputs
- Compact Size: 12" x 5" x 2"
- 75% Efficiency Typical
- $\geq 6$  Watts Per Cubic Inch
- Optional Fan Mounted On Cover
- Optional Current Sharing On All Outputs

## AGENCY APPROVALS



Internet: <http://www.cdpowerelectronics.com>

**Power Electronics Division, United States**  
3400 E Britannia Drive, Tucson, Arizona 85706  
Phone: 800.547.2537 Fax: 520.770.9369

**Power Electronics Division, Europe**  
C&D Technologies (Power Electronics) Ltd.  
132 Shannon Industrial Estate, Shannon, Co. Clare, Ireland  
Tel: +353.61.474.133 Fax: +353.61.474.141

## Input Specifications

Parameter	Conditions	Min	Typ	Max	Units
Operating Range	47-63Hz	90		264	VAC
Inrush Current	120VAC, cold start			40	APK
	240VAC, cold start			80	APK
Efficiency	Nominal line and full load		75		%
Power Factor Correction (PFC)	Meets EN61000-3-2		0.99		

### Remote Sense

Remote Sense is provided on all outputs and will compensate for 0.7V of line drop. Remote Sense leads are protected against open, short, and reversal.

### Remote On/Off

The power supply is turned on with a TTL logic '1' (or open) signal and turned off by a switch closure or TTL logic '0' referenced to (-) sense terminal. Consult the factory for other options.

### Over Voltage Protection

Output #1: 6.25V,  $\pm 0.8$  V<sub>DC</sub>.

The power supply will latch off until AC power is cycled.

### Over Current Protection

Individual current limit on all outputs. Automatic recovery upon fault removal.

### Reverse Voltage Protection

All outputs are protected to rated load.

### Transient Response

The peak output voltage excursion on the main output will not exceed 2% and will recover within 1% in 200  $\mu$ Sec for a 25% load step change.

### Output Isolation

All outputs are fully isolated.

### Power Fail Signal

Upon AC input voltage removal, the power fail signal drops to logic zero at least 5msec before loss of DC output. Upon AC input turn-on, signal remains low until outputs are in regulation referenced to (-) sense terminal. Consult the factory for other options.

### DC Power Good Signal

Upon a  $\pm 10\%$  loss of regulation on any output, the DC Good signal drops to a logic zero referenced to (-) sense terminal. Consult the factory for other options.

### Over Temperature Protection

Internal thermal switch turns off power supply if overheating occurs and automatically restarts when temperature drops below threshold.

### Safety

UL Recognized: UL File Number 14675 (1950 & 1012)

CSA Certified: CSA File Number LR9070-154C  
(C22.2 No. 234-M90, Level 6)

TUV License Number: R9576032 (EN60950) (IEC950)

### Cooling

The unit is designed to operate with 30 CFM of airflow.

## Output Voltages and Maximum Rated Loads

MODEL NUMBER	OUTPUT #1		OUTPUT #2		OUTPUT #3	
	V <sub>OUT</sub>	I <sub>MAX</sub>	V <sub>NOM</sub>	I <sub>MAX</sub>	V <sub>NOM</sub>	I <sub>MAX</sub>
KX750-F3A	± 5V	100A	± 12V	20A	± 12V	20A
KX750-F2B	± 5V	100A	± 12V	20A		
KX750-F1C	± 5V	100A				

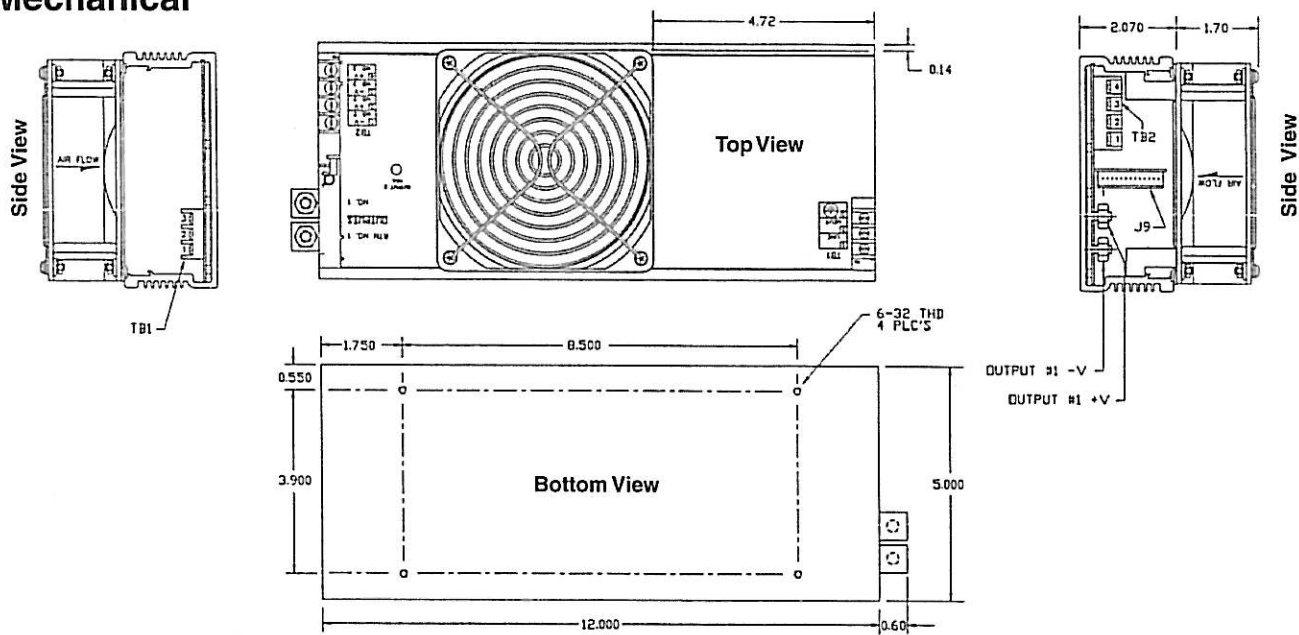
NOTE: Total power not to exceed 750 watts.

## Output Specifications

Parameter	Limits	
Regulation	Main Output	Outputs #2 - 3
Line	±0.1%	±0.2%
Load	±0.2%	±0.4%
Cross	±0.2%	±0.2%
Minimum Load		
Output #1	5.0A	
Outputs #2 & #3	1.0A	
Hold-Up Time	>20mSec at Full Load	

Parameter	Conditions	Min	Typ	Max	Units
Voltage Adjustment Range	Nominal line on all outputs		±5		%
PARD	20 MHz bandwidth			1	% P-P
Temperature					
Operating		0		50	°C
	Derates 20W/°C	50		70	°C
Storage		-20		+85	°C
Humidity Range	Non-condensing	0		95	%
Temperature Coefficient (Tc)	All outputs after half hour warm-up			± 0.02	%/°C

## Mechanical



### NOTES:

All measurements are in inches

**FAN MOUNTED ON COVER ADDS 1.70".**

**COOLING:** The KX750 is designed to operate with 30 CFM airflow in 50°C ambient temperature.

**SHOCK AND VIBRATION:** The KX750 meets the requirements of MIL-STD-810D. (Vibration-Method 514.3 Procedure I; Shock-Method 516.3 Procedure I).

**WEIGHT:** Approximately 6 lbs.

## Pin Specifications

Terminal Block 1		Terminal Block 2	
POS	FUNCTION	POS	FUNCTION
1	AC Line	1	-V2
2	AC Neutral	2	+V2
3	Ground	3	-V3
		4	+V3

## Connector Specifications

J9 Connector Molex No. 22-08--1140	
PIN	FUNCTION
1	- Remote Sense #2
2	+ Remote Sense #2
3	Current Sense Bus #2
4	- Remote Sense #3
5	+ Remote Sense #3
6	Current Sense Bus #3
7	+ Remote Sense #1
8	- Remote Sense #1
9	Sync I/O
10	AC Power Fail Alarm
11	Status/Control Return
12	DC Power Good
13	Remote Inhibit
14	Current Sense Bus #1

Standard Options are shown, consult factory for other available options.

The information provided herein is believed to be reliable; however, C&D TECHNOLOGIES assumes no responsibility for inaccuracies or omissions. C&D TECHNOLOGIES assumes no responsibility for the use of this information, and all use of such information shall be entirely at the user's own risk. Prices and specifications are subject to change without notice. No patent rights or licenses to any of the circuits described herein are implied or granted to any third party. C&D TECHNOLOGIES does not authorize or warrant any C&D TECHNOLOGIES product for use in life support devices/systems or in aircraft control applications.