

750 WATT AC/DC POWER SUPPLY

KT750



FEATURES

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

DESCRIPTION

The KT750 Series is a family of low-profile, fully featured, multiple-output, 750W power supplies with a 3.3V main output. These high-current output platforms will support requirements in which the logic has largely migrated from 5V to 3.3V. With active Power Factor Correction (PFC) to EN61000-3-2, wide-range input of 90-264VAC, EMI compliance to FCC and VDE Class B, and "CE" Marking, the KT750 series is ideal for systems targeting worldwide markets. The complement of standard features includes remote sense compensation, output voltage adjustment, remote inhibit, power fail warning, DC OK, and thermal shutdown. All outputs are fully isolated, regulated, and current limited. A complete array of output voltage configurations is available to handle a broad range of applications. Available options include a cover with integral fan, an end-mounted fan cover, and active current sharing on all outputs for redundant applications.

AGENCY APPROVALS



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Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Operating Range	47-63Hz	90		264	VAC
Input Current	Nominal line, full load			11	A
Inrush Current	120VAC, 25°C, cold start			40	Apk
	240VAC, 25°C, cold start			80	Apk
Efficiency	Nominal line, full load		70		%
Holdup	Full load	20			msec
Power Factor ⁽¹⁾	Full load		0.99		

Notes: (1) Harmonic currents meet EN61000-3-2

Output Voltages and Maximum Rated Loads

MODEL NUMBER	OUTPUT #1		OUTPUT #2		OUTPUT #3	
	V _{OUT}	I _{MAX}	V _{NOM}	I _{MAX}	V _{NOM}	I _{MAX}
KT750-F1A	± 3.3V	100A				
KT750-F3A	± 3.3V	100A	± 5V	20A	± 12V	20A
KT750-F2B	± 3.3V	100A	± 5V	20A		
KT750-F2C	± 3.3V	100A	± 12V	20A		
KT750-F3D	± 3.3V	100A	± 12V	20A	± 12V	20A

Output Specifications

Parameter	Conditions	Min	Typ	Max	Units
Output Power	All environmental and line conditions			750	Watts
Voltage Adjustment Range	Relative to nominal output voltage, all outputs		± 5		%
Output Regulation Output V1	Line			± 0.1	%
	Load			± 0.2	%
	Cross			± 0.2	%
Auxiliary outputs	Line			± 0.2	%
	Load			± 0.4	%
	Cross			± 0.2	%
Minimum Load	Output V1	5			A
	Auxiliary outputs	1			A
PARD	V1, at output terminals, 20MHz B/W			50	mVp-p
	Auxiliary Outputs			1	% pk-pk
Temperature Coefficient	0° to 50°C, after 30 minute warm-up		± 0.02		%/°C

Environmental Specifications

Parameter	Conditions	Min	Typ	Max	Units
Ambient Temperature	Output de-rated linearly to 50% of rated capacity between 50°C and 70°C	0		+70	°C
	Non-operating	-20		+85	°C
Altitude	Operating			+10,000	Feet
Altitude	Non-operating			+50,000	Feet
Shock	Per MIL-STD-810D, Method 516.3, Procedure I				
Vibration	Per MIL-STD-810D, Method 514.3, Procedure I				
Cooling	The KT750 is designed for full load operation in a 50°C ambient with 30 CFM airflow.				

Product Features

Features	Characteristic
Remote Sense	500mV compensation, Output V1; 700mV compensation Outputs V2 & V3
Active Current Sharing Option	Single Wire; 2% of max rated load
Cover w/Integral Fan	Optional on all models
End Mounted Fan Cover	Consult the factory
OVP	4.3V +0.5V, Output V1, latching
Overcurrent Protection	All outputs individually current limited with automatic recovery
Thermal Shutdown	Automatic Restart
DC OK Signal (H)	Logic "1" when all outputs are present
Power Fail Warning Signal (H)	Transition to Logic "0" at least 10msec before loss of output regulation
Remote Inhibit (L)	Logic "0" applied will inhibit output (referenced to Status/Control Return)

Product Compliances

Approval	Characteristic
UL	UL1950 and UL1012, File No. E46379
CSA	C22.2 No. 234-M90, Level 6. File No. LR57085
TUV	EN60950, License No. R9479116
FCC, Part 15	Class B requirements for conducted emissions
VDE	Class B requirements for conducted emissions
CE Mark	Low Voltage Directive

Ordering Information

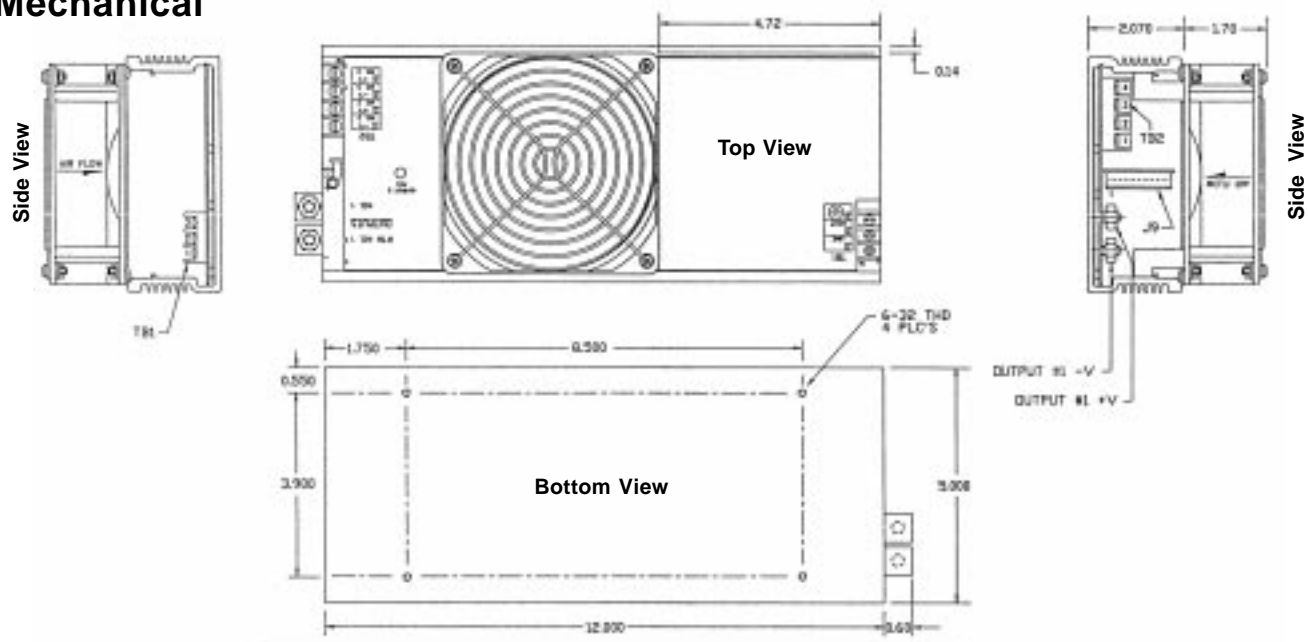
Model Designation (1)	
BASE MODEL	KT750
Chassis: "F" = finned, "M" = modified _____	
Number of Outputs (1,2,or 3) _____	
Output Voltage: See chart on facing page _____	
Input Filter: "B" designates Class B EMI filter (standard feature) _____	
Cover: "C" = plain cover, "F" = top mounted fan, "V" = end mounted fans ⁽²⁾ _____	
Remote Inhibit: "L" designates transition to Logic "0" applied inhibits output (standard configuration) _____	
Power Fail Warning: "H" designates transition to Logic "0" upon loss of AC (standard configuration) _____	
DC OK: "H" designates that Logic "1" indicates a DC OK condition (standard configuration) _____	
Active Current Share: "A" = Output V1; "B" = Outputs V1, V2, V3; N = None _____	

NOTES: (1) Standard configuration shown; consult factory for other available options

(2) Cover required for compliance with EMI specifications

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Mechanical



NOTES:

All dimensions are in inches

FAN MOUNTED ON COVER ADDS 1.70".

COOLING: The KT750 is designed to operate with 30 CFM airflow in 50°C ambient temperature.

SHOCK AND VIBRATION: The KT750 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

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