

KAM07 SERIES



AC - DC POWER MODULE
6.3 ~ 7.6W UL / cUL / TUV / CE

FEATURES

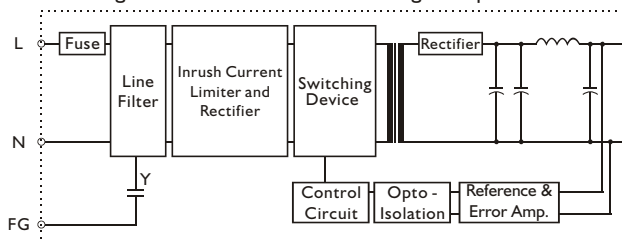
- AC/DC POWER MODULE
- UNIVERSAL INPUT 85 ~ 265 VAC
- HIGH EFFICIENCY UP TO 79%
- SHORT CIRCUIT PROTECTION
- INTERNAL INPUT FILTER
- 2 YEARS WARRANTY

MODEL LIST

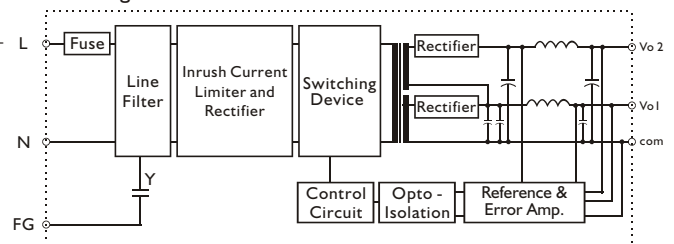
MODEL NO.	INPUT VOLTAGE	OUTPUT WATTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFF. (typ.)	EFF. (min.)
Single Output Models						
KAM0703	85~265 VAC	6.6 WATTS	+3.3 VDC	2000 mA	72%	69%
KAM0705	85~265 VAC	7.5 WATTS	+ 5 VDC	1500 mA	75%	72%
KAM0712	85~265 VAC	7.5 WATTS	+ 12 VDC	630 mA	78%	75%
KAM0715	85~265 VAC	7.5 WATTS	+ 15 VDC	500 mA	78%	75%
KAM0724	85~265 VAC	7.6 WATTS	+ 24 VDC	320 mA	79%	77%
Dual Output Models						
KAM0712D	85~265 VAC	7.6 WATTS	± 12 VDC	± 320 mA	77%	74%
KAM0715D	85~265 VAC	7.5 WATTS	± 15 VDC	± 250 mA	78%	75%
KAM07503D	85~265 VAC	6.3 WATTS	+3.3 /+ 5 VDC	+1 A /+0.6A	68%	65%
KAM07512D	85~265 VAC	6.6 WATTS	+5 /+12 VDC	+0.6A /+0.3A	75%	72%

CIRCUIT SCHEMATIC

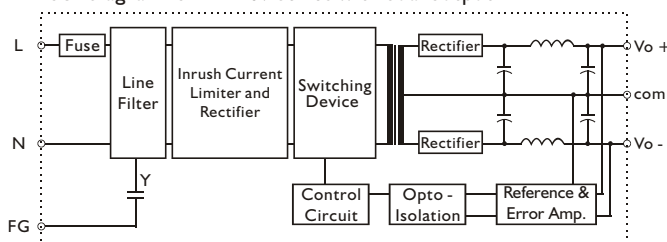
• Block diagram for KAM07 series with single output



• Block diagram for KAM07503D & KAM07512D



• Block diagram for KAM07 series with dual output



SPECIFICATION

All Specifications Typical At Nominal Line, Full Load, 25°C Unless Otherwise Noticed

GENERAL

Characteristics	Conditions	min.	typ.	max.	unit
Switching frequency	Vi nom, Io nom	80			KHz
Isolation voltage	Input / Output	3,000			VAC
Isolation resistance	Input / Output, @ 500VDC	100			MΩ
Ambient temperature	Operating at Vi nom, Io nom	-20		+ 71	°C
Case temperature	Operating at Vi nom, Io nom			+ 85	
Derating	Vi nom, Io nom + 51 to + 71°C			2	% / °C
Storage temperature	Non operational	-40		+ 100	°C
Relative humidity	Vi nom, Io nom			95	% RH
Dimension	L58 x W45 x H18.5				mm
Cooling	Free air convection				
Case material	Plastic				

INPUT SPECIFICATIONS

Characteristics	Conditions	min.	typ.	max.	unit
Rated input voltage	Io nom	85		240	VAC
Input voltage range	Io nom AC in	85		265	VAC
	Io nom DC in	120		370	VDC
Line frequency	Vi nom, Io nom	47		63	Hz
Inrush current	Io nom Vi : 115VAC			10	A
	Io nom Vi : 230VAC			18	A

OUTPUT SPECIFICATIONS

Characteristics	Conditions	min.	typ.	max.	unit
Output voltage accuracy	Vi nom, Io nom			± 2	%
Minimum load	Vi nom single output models	0			%
	Vi nom dual output models (each output)	20			%
Line regulation	Io nom, Vi min ... Vi max			± 1	%
Load regulation	Vi nom, single output models			± 2	%
	Io min .. Io nom. dual output models			± 5	%
Transient recovery time	Vi nom, Io nom = I ↔ 0.5 Io nom		300		μs
Temperature coefficient	Vi nom, Io nom			± 0.02	% / °C
Ripple & noise	Vi nom, Io nom, BW = 20MHz	Vout x ± 1% p-p max.			mV
Efficiency	Vi nom, Io nom, Po / Pi	Up to 79%, See model list			

CONTROL AND PROTECTION

Input fuse	T2A / 250VAC internal
Output short circuit	By current limited

APPROVALS AND STANDARDS

UL / cUL	UL1950
TUV	EN60950
CE	EN55022 class B for EMI
	EN50082-1 for EMS

mm [inch]



CASE SIZE	58 x 45 x 18.5 mm 2.28 x 1.77 x 0.73 inches
CASE MATERIAL	Plastic
WEIGHT	85 g

GENERAL						
PIN NO.	1	2	3	4	5	6
SINGLE	LINE	NEUTRAL	F. G.	Vo -	NO PIN	Vo +
DUAL	LINE	NEUTRAL	F. G.	Vo -	com	Vo +
	LINE	NEUTRAL	F. G.	+ 5V	com	+ 3.3V
	LINE	NEUTRAL	F. G.	+ 12V	com	+ 5V

Figure 10 is a line graph showing Power out [%] versus Temperature [°C]. The y-axis ranges from 0 to 100, and the x-axis ranges from -20 to 71. A solid line represents the power output, which is constant at 100% from -20°C to 51°C and then decreases linearly to 60% at 71°C. A horizontal line is drawn at 60% power output. A vertical dashed line is at 51°C.