

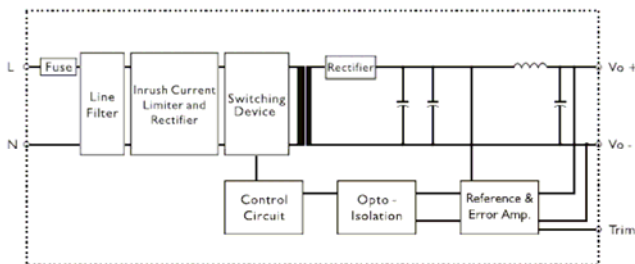
**OPEN FRAME
AC-DC POWER MODULE
13~15W SINGLE & DUAL OUTPUTS
Universal 85 ~ 265 VAC/ 120-370VDC
High Efficiency
Internal Input Filter
Short Circuit Protection**



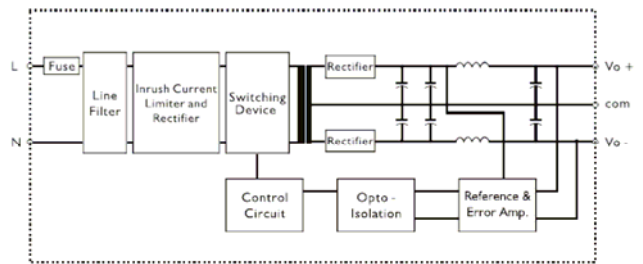
SINGLE OUTPUT MODELS						
Part Number	Input Voltage	Output Wattage	Output Voltage	Output Current	Efficiency (typical)	Efficiency (minimum)
CA15KAD03	85~265VAC	13 Watts	3.3 VDC	4000mA	73%	70%
CA15KAD05	85~265VAC	15 Watts	5VDC	3000mA	76%	74%
CA15KAD12	85~265VAC	15 Watts	12VDC	1250mA	82%	80%
CA15KAD15	85~265VAC	15 Watts	15VDC	1000mA	82%	80%
CA15KAD24	85~265VAC	15 Watts	24VDC	625mA	82%	80%

DUAL OUTPUT MODELS						
Part Number	Input Voltage	Output Wattage	Output Voltage	Output Current	Efficiency (typical)	Efficiency (minimum)
CA15KAD12D	85~265VAC	15 Watts	+/-12VDC	+/-625mA	81%	79%
CA15KAD15D	85~265VAC	15 Watts	+/-15VDC	+/-500mA	80%	78%
CA15KAD503D	85~265VAC	15 Watts	+5/+3.3VDC	+1A/+3A	74%	72%

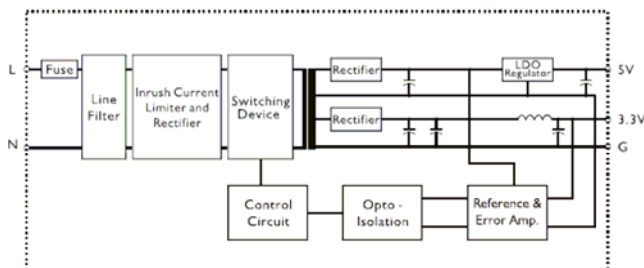
Block diagram for CA15KAD series with single output



Block diagram for CA15KAD series with dual output



Block diagram for CA15KAD503D



All Specifications Typical at Nominal Line, Full Load, 25 C Unless Noted Otherwise

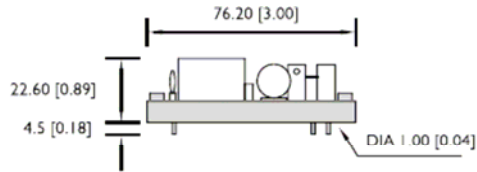
GENERAL					
Characteristics	Conditions	Min	Typ	Max	Unit
Switching frequency	Vi nom, Io nom		100		KHz
Isolation Voltage	Input/Output	3,000			VDC
Isolation Resistance	Input/Output, @500VDC	100			MΩ
Ambient Temp.	Operating at Vi nom Io nom	-20		+71	C
Derating	Vi nom, Io nom +51 to +71C			2	%/C
Storage Temp.	Non Operational	-40		+100	C
Relative Humidity	Vi nom, Io nom			95	% RH
Cooling	Free air convection				

INPUT SPECIFICATIONS					
Characteristics	Conditions	Min	Typ	Max	Unit
Rated Input Voltage	Io nom	85		265	VAC
Input Voltage Range	Io nom	AC in	85	265	VAC
		DC in	120	370	VDC
Line Frequency	Vi nom, Io nom	47		63	Hz
Inrush Current	Io nom	Vi:115VAC		10	A
		Vi:230VAC		18	A

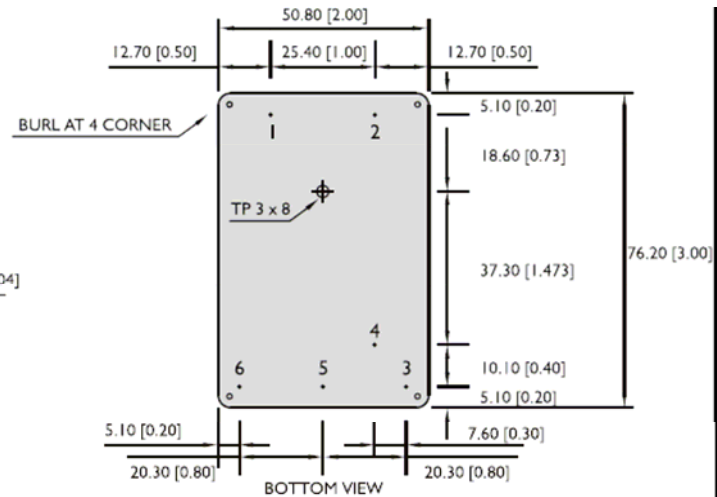
OUTPUT SPECIFICATIONS					
Characteristics	Conditions	Min	Typ	Max	Unit
Output voltage accuracy	Vi nom, Io nom			+/-2	%
Minimum load	Vi nom single output model	0			%
	Vi nom dual output model (each output)	20			%
Line regulation	Io nom, Vi min ... Vi max			+/-1	%
Load regulation	Vi nom, Io min Io nom	single output models		+/-2	%
		dual output models		+/-5	%
Transient recovery time	Vi nom, Io nom= to 0.5 Io nom		1,000		uS
Temperature coefficient	Vi nom, Io nom			+/-0.02	%/C
Ripple & Noise	Vi nom, Io nom, BW =20MHz	3.3V models		100	mV
		5V-24V model	Vout x +/-1% p-p max.		mV
External trim Adj Range (for single output only)	Io = 5% ...100%	-10		+10	%
Efficiency	Vi nom, Io nom, Po/Pi	Up to 82%, see model list			

Control & Protection	
Input Fuse	T2A/250VAC internal
Output short circuit	By current limited

mm [inch]



Plastic base, weight 85 g



PIN ASSIGNMENT						
Pin No	1	2	3	4	5	6
SINGLE	AC IN	AC IN	Vo-	TRIM	NO PIN	Vo +
DUAL	AC IN	AC IN	Vo- or +3.3V	NO PIN	com	Vo + or +5V

DERATING

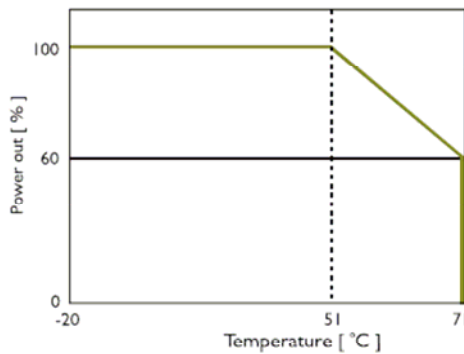
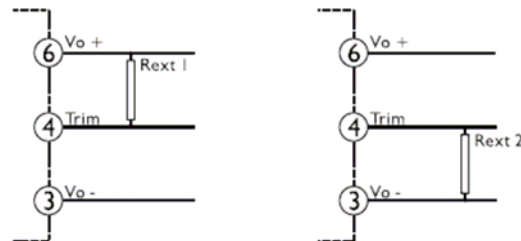


Fig. 1 Trim connection
(For single output only)



Typical resistor values for various output voltage adjustment settings

TYPE	Rext 1		Rext 2	
	Uo nom -5%	Uo nom -10%	Uo nom +5%	Uo nom +10%
CA15KAD03	180K Ω	56K Ω	100K Ω	20K Ω
CA15KAD05	39K Ω	15K Ω	9.1K Ω	2.2K Ω
CA15KAD12	51K Ω	20K Ω	10K Ω	2K Ω
CA15KAD15	150K Ω	68K Ω	20K Ω	4.7K Ω
CA15KAD24	130K Ω	56K Ω	12K Ω	2K Ω