CUS150M1/A

SPECIFICATIONS

CA848-01-01/A-B

	ITEMS / MODEL			CUS150M1-12/A	CUS150M1-18/A	CUS150M1-24/A	CUS150M1-36/A	CUS150M1-48/A
1	Nominal Output Voltage		V	12	18	24	36	48
2	Maximum Output Current		A	12.5	8.4	6.3	4.2	3.2
3	Maximum Output Power		W	150.0	151.2	151.2	151.2	153.6
4	Efficiency (Typ.)	115/230 VAC (*1)	%	92/ 93	90 / 91	91/ 92	92/ 93	92 / 93
5	Input Voltage Range	(*2)	-	85 - 265 VAC (47-63Hz)				
6	Input Current (Typ.)	115/230 VAC (*1)	A	1.8/ 0.9				
7	In-rush Current (Typ.)	115/230 VAC (*1)(*3)	-	35A / 70A at Cold Start				
8	PFHC		-	Built to meet IEC61000-3-2,Class A				
9	Power Factor (Typ.)	115/230 VAC (*1)	-	0.98/0.94				
10	Output Voltage Range		V	11.7 ~ 12.6	17.6 ~ 18.9	23.5 ~ 25.2	35. 2~ 37.8	47~ 50.4
11	Maximum Ripple & Noise	115/230 VAC (*1)(*4)(*5)	mV	180	180	240	360	480
12	Maximum Line Regulation	(*4)(*6)	mV	60	90	120	180	240
13	Maximum Load Regulation	(*4)(*7)	mV	120	180	240	360	480
14	Temperature Coefficient	(*4)	-	Less than 0.02% / ℃				
15	Over Current Protection	(*8)	A	> 13.2	> 8.9	> 6.7	>4.5	> 3.4
16	Over Voltage Protection	(*9)	V	13.2 - 16.2	19.8 - 24.3	26.4 - 32.4	39.6 ~ 48.6	52.8 - 64.8
17	Hold-up time (Typ.)	(*1)	-	20ms				
18	Leakage Current	(*10)	-	0.3mA max @ 265VAC,60Hz				
19	Parallel Operation		-	-				
20	Series Operation		-	Possible				
21	Operating Temperature	(*11)	-	-20℃- +60℃				
22	Operating Humidity		-	10 - 95%RH (No condensing)				
23	Storage Temperature		-	-40°C - +85°C				
24	Storage Humidity		-	10 - 95%RH (No condensing)				
25	Cooling		-	Convection Cooling				
26	Withstand Voltage		-	Input-FG : 2kVAC (20mA) 1x MOPP Input-Output : 4kVAC (20mA) 2x MOPPs Output-FG : 1.5kVAC (20mA) 1xMOPP				
27	Isolation Resistance		-	More than 100MΩ at 25°C,70%RH, Output - FG : 500VDC				
28	Vibration		-	At no operating, 10-55Hz (Sweep for 1min.) Maximum 19.6m/s^2 X,Y,Z 1 hour each				
29	Shock		-	Less than 196m/s^2 and MIL-STD-810F				
30	Safety		-	Approved by IEC/EN62368-1,UL62368-1,CSA62368-1 Approved by IEC/EN60601-1,ES60601-1,CSA-C22.2 No.60601-1				
31	EMI	(*1)	-	Designed to meet EN55011-B, EN55032-B, FCC-Class B				
32	Immunity		-	Designed to meet IEC61000-4-2 (Level 2,3), IEC61000-4-3 (Level 3), IEC61000-4-4 (Level 3), IEC61000-4-5 (Level 3,4), IEC61000-4-6 (Level 3), IEC61000-4-8 (Level 4), IEC61000-4-11				
33	Weight (Typ.)		g	450				
34	Size (L x W x H)		mm	140 x 90 x 43 (Refer to Outline Drawing)				

*Read instruction manual carefully, before using the power supply unit.

=NOTES=

*1.Ta=25℃, Nominal output voltage and maximum output power.

*2. For cases where conformance to various safety specs (UL, CSA, EN) are required,
input voltage range will be 100 ~ 240VAC (50-60Hz).
Output derating required when Vin is less than 115VAC, refer to output derating curve for details.

*3. Not applicable for the in-rush current to Noise Filter for less than 0.2ms.

*4. Please refer to Fig. A for measurement of Vo, line and load regulation and ripple voltage.

*5. Ripple & noise are measured at 20MHz by using a 150mm twisted pair of load wires terminated with a 0.1uF and 100uF capacitor.

*6. 85~265VAC, constant load.

*7. No load - full load, constant input voltage.

*8. Hiccup with automatic recovery,however power supply may be latched for protection when output is shorted and manual reset is required (Repower on) .
Avoid to operate at over load or short circuit condition for more than 30 seconds.

*9. OVP circuit shut down the output, manual reset (Repower on) to get output voltage.

*10. Measured by the each measuring method of UL, CSA, and EN (at 60Hz), Ta=25°C.

*11. Refer to Output Derating Curve for details of output derating versus
input voltage, ambient temperature and mounting method .
- Load (%) is percent of maximum output power or maximum output current.
Do not exceed its derating of Maximum Load.
- maximum load start up at -40°C is possible. However, it may not fulfill all the specifications.

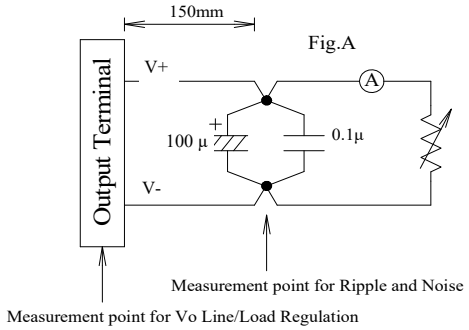


Fig.A

CUS150M1/A

OUTPUT DERATING

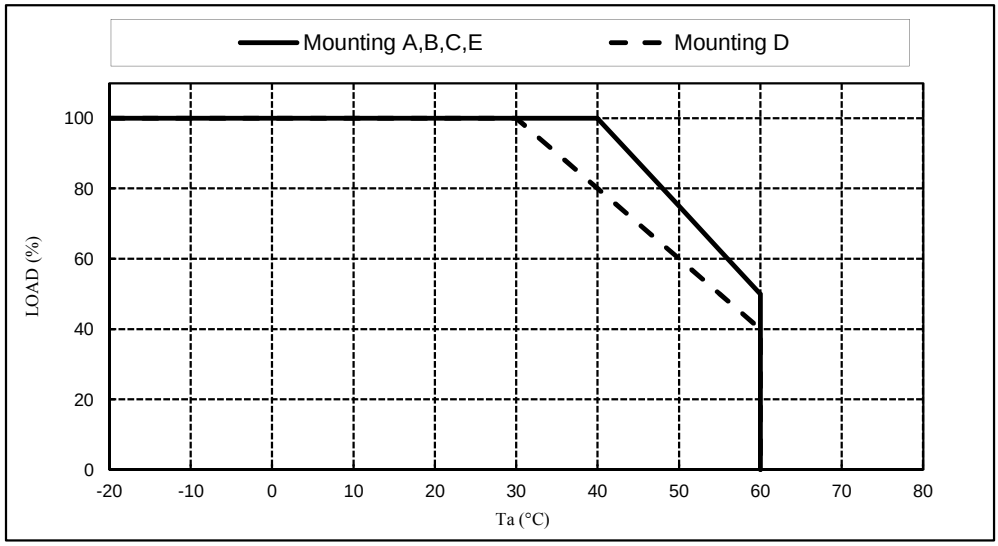
CA848-01-02/A

OUTPUT DERATING VERSUS OPERATING AMBIENT TEMPERATURE (Ta)

*COOLING : CONVECTION COOLING

FOR ALL MODELS

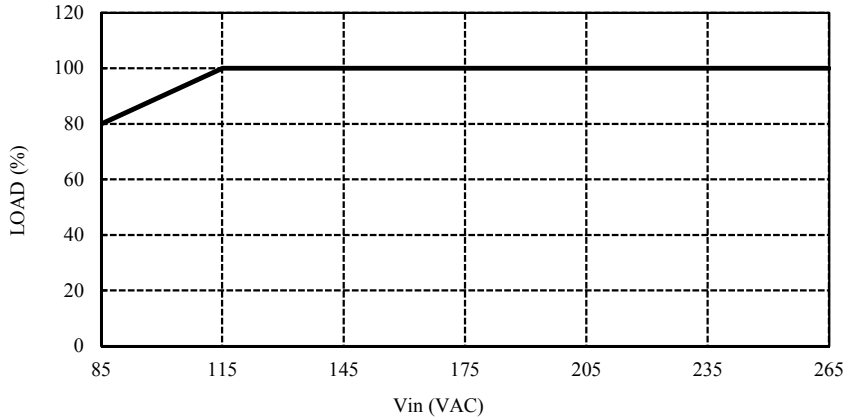
Ta (°C)	MOUNTING A,B,C,E	MOUNTING D
	LOAD (%)	LOAD (%)
-20 - +30	100	100
40	100	80
50	75	60
55	63	50
60	50	40



OUTPUT DERATING VERSUS INPUT VOLTAGE

FOR ALL MOUNTINGS AND ALL MODELS

INPUT VOLTAGE (VAC)	LOAD (%)
85	80
115~265	100



MOUNTING METHOD