

CUS350M

SPECIFICATIONS

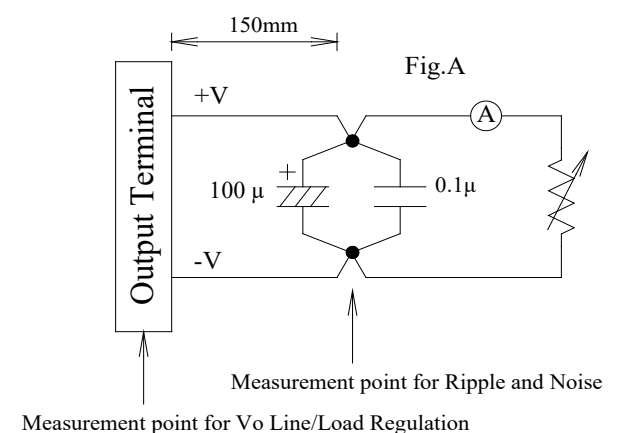
CA820-01-01D

ITEMS		MODEL	CUS350M-12	CUS350M-18	CUS350M-24	CUS350M-36	CUS350M-48
1	Nominal Output Voltage	V	12	18	24	36	48
2	Maximum Output Current @ Convection cooling	A	29	19.4	14.7	9.7	7.3
	Maximum Output Current @ Forced air cooling (*13)	A	34.5	23	17.5	11.5	8.7
3	Maximum Output Power @ Convection cooling	W	348.0	349.2	352.8	349.2	350.4
	Maximum Output Power @ Forced air cooling (*13)	W	414	414	420	414	417.6
4	Standby Mode Power	-	5V, 0.5A				
	Fan Supply	-	- (Available only with option models)				
5	Efficiency @ Convection cooling (Typ.) 115/230 VAC (*1)	%	91 / 93	91 / 94	91 / 94	91 / 93	91 / 94
	Efficiency @ Forced air cooling (Typ.) 115/230 VAC (*1)(*13)	%	91 / 93	91 / 94	91 / 94	91 / 93	91 / 94
6	Input Voltage Range (*2)	-	85 - 265 VAC (47-63Hz) or 120 - 370 VDC				
7	Input Current(Typ. Convection cooling) 115/230 VAC (*1)	A	4 / 2				
	Input Current(Typ. Forced air cooling) 115/230 VAC (*1)(*13)	A	4.5 / 2.3				
8	Inrush Current (Typ.) 115/230VAC(*1)(*3)	-	20A / 40A at Cold Start				
9	PFHC	-	Built to meet EN61000-3-2				
10	Power Factor (Typ.) 115/230 VAC (*1)	-	0.99 / 0.95				
11	Output Voltage Range	-	11.4 - 12.6	17.1 - 18.9	22.8 - 25.2	34.2 - 37.8	45.6 - 50.4
12	Maximum Ripple & Noise @ Convection cooling 115/230 VAC (*1)(*4)(*5)	mV	120	180	240	360	480
	Maximum Ripple & Noise @ Forced air cooling 115/230 VAC (*1)(*4)(*5)(*13)	mV	150	200	240	360	480
13	Maximum Line Regulation (*4)(*6)	mV	60	90	120	180	240
14	Maximum Load Regulation (*4)(*7)	mV	120	180	240	360	480
15	Remote Off Power Consumption (Typ.) (*12)	-	0.5W @ 230VAC				
16	Temperature Coefficient (*4)	-	Less than 0.02% / °C				
17	Over Current Protection (*8)	A	>38	>26	>20	>13	>9.7
18	Over Voltage Protection (*9)	V	13.8 - 16.2	20.7 - 24.3	27.6 - 32.4	41.4 - 48.6	55.2 - 64.8
19	Hold-up Time (Typ.with Maximum Output Power @ Convection cooling)	-	20ms				
20	Leakage Current (*10)	-	0.3mA max @265VAC,60Hz				
21	Remote ON/OFF Control	-	Possible Uncommitted isolated optocoupler diode, power diode inhibits the supply				
22	Remote Sense	-	Compensates for 0.5V maximum voltage drop (See Instruction Manual)				
23	Power Good	-	- (Available only with option models)				
24	Parallel Operation	-	-				
25	Series Operation	-	Possible				
26	Operating Temperature (*11)	-	-20°C - +70°C				
27	Operating Humidity	-	10 - 95%RH (No condensing)				
28	Storage Temperature	-	-40°C - +85°C				
29	Storage Humidity	-	10 - 95%RH (No condensing)				
30	Cooling (*13)	-	Convection or Forced air cooling				
31	Withstand Voltage	-	Input-FG : 2kVAC (20mA) 1xMOPP, Input-Output : 4kVAC (20mA) 2xMOPPs Output-FG : 1.5kVAC (20mA) 1xMOPP.				
32	Isolation Resistance	-	More than 100MΩ at 25°C,70%RH, Output - FG : 500VDC				
33	Vibration	-	At no operating, 10-55Hz (Sweep for 1min.) Maximum 19.6m/s ² X,Y,Z 1 hour each				
34	Shock	-	Less than 196m/s ² and MIL-STD-810F				
35	Safety	-	Approved by IEC/EN62368-1, UL62368-1, CSA62368-1 Approved by IEC/EN60601-1, ES60601-1, CSA-C22.2 No.60601-1				
36	EMI 115/230VAC(*1)	-	Designed to meet EN55011-B, EN55032-B, FCC, CE:Class B,RE:Class A @ Convection cooling				
37	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, IEC60601-1-2 Ed.4.1				
38	Weight (Typ.)	g	850				
39	Size (L x W x H)	mm	190 x 87 x 40 (Refer to Outline Drawing)				

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

=NOTES=

- *1. At Ta=25°C, 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
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.
- *12. The power consumption refers to input power during remote off and standby mode power is at no load condition.
- *13. Forced air cooling with air velocity more than 1.5m/s (measured at component side, air must flow through component side)



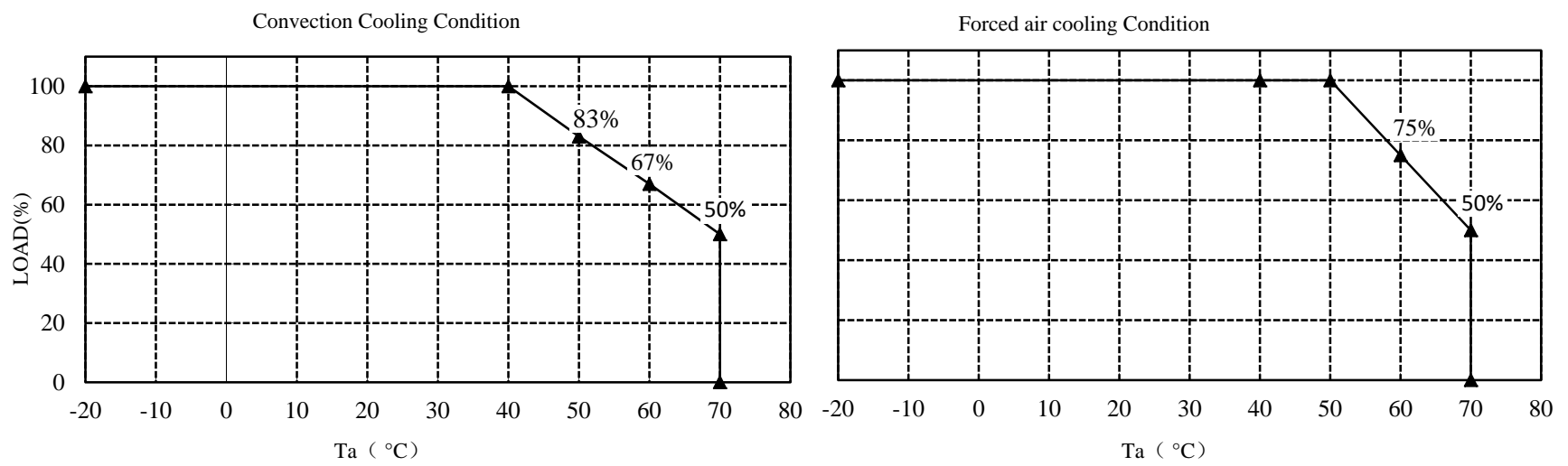
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OUTPUT DERATING

CA820-01-02A

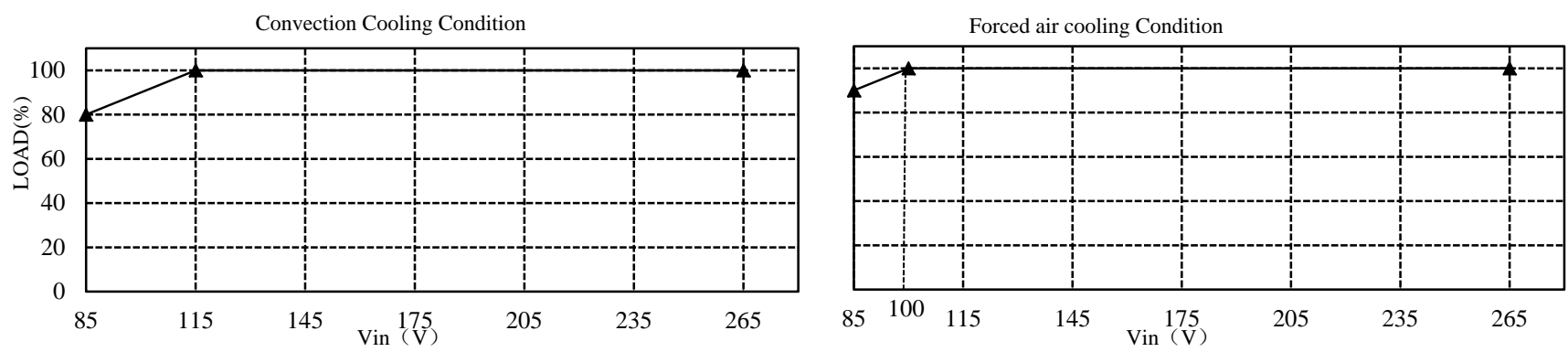
OUTPUT DERATING VERSUS OPERATING AMBIENT TEMPERATURE (Ta)

Ta (°C)	LOAD (%)	
	Convection cooling	Forced air cooling
-20 - +40	100	100
50	83	100
60	67	75
70	50	50

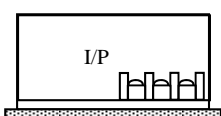


OUTPUT DERATING VERSUS INPUT VOLTAGE

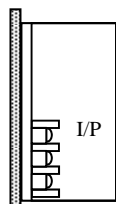
INPUT VOLTAGE (VAC)	LOAD (%)	
	Convection cooling	Forced air cooling
85	80	90
115~265	100	100



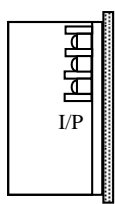
MOUNTING A
(STANDARD MOUNTING)



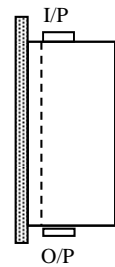
MOUNTING B



MOUNTING C



MOUNTING D



MOUNTING E

