

CS300 SPECIFICATIONS

DWG No.

CA788-01-01A

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Verification of the latest version shall be conducted by PLM system.

ITEMS		MODEL	CS300-5	CS300-12	CS300-24	REV.
1	Nominal Output Voltage	V	5	12	24	
2	Maximum Output Current (Peak Output Current) (* 1)	A	55(60)	26	13	
3	Maximum Output Power (Peak Output Power) (* 1)	W	275(300)	312	312	
4	Efficiency (Typ) (230VAC) (* 2)	%	77	83	85	
5	Input Voltage Range (* 3,11)	—	176~ 265VAC (47-63Hz) or 240~370VDC			
6	Input Current (Typ) (230VAC) (* 2)	A	4.0			
7	Inrush Current (Typ) (* 4)	—	55A at 230VAC, Ta=25°C, Cold Start			
8	Output Voltage Range	V	4.5~6.0	9.6~13.2	20~28.8	
9	Ripple and Noise (230VAC) (* 2, 5)	mV	100	100	150	
10	Line Regulation (* 5, 6)	mV	20	48	96	
11	Load Regulation (* 5, 7)	mV	40	96	120	
12	Temperature Coefficient	—	Less than 0.02%/°C			
13	Over Current Protection (* 8)	A	63~	27.3~	13.7~	
14	Over Voltage Protection (* 9)	V	6.25~7.5	13.8~16.8	30.0~34.8	
15	Over Temperature Protection (* 9)	—	Yes			
16	Hold-Up Time (Typ) (230VAC) (* 2)	—	20ms			
17	Leakage current (* 10)	—	0.5mA(Typ)at 230Vac, 0.75mA max @ 265VAC,60Hz			
18	Series Operation	—	Possible			
19	Operating Temperature (* 11)	—	- 20 ~ + 70 °C			
20	Operating Humidity	—	30 ~ 90 %RH (No dewdrop)			
21	Storage Temperature	—	- 30 ~ +85°C			
22	Storage Humidity	—	10 ~ 95%RH (No dewdrop)			
23	Cooling	—	Forced Air By Blower Fan			
24	Withstand Voltage	—	Input - Output : 3.0kVAC (20mA), Input - FG : 2.0kVAC (20mA) Output - FG : 500VAC (100mA) for 1min.			
25	Isolation Resistance	—	More than 100MΩ at Ta=25°C and 70%RH, Output - FG : 500VDC			
26	Vibration	—	At no operating, 10 - 55Hz (sweep for 1min) 19.6m/s ² Constant, X, Y, Z. 1hour each			
27	Safety	—	Built to meet EN60950-1, GB4943			A
28	EMI (* 2)	—	Built to meet FCC-Class B, EN55011/EN55022-B			
29	Immunity (* 2)	—	Built to meet EN61000-4-2,-3,-4,-5,-6,-8,-11			
30	Weight (Typ)	g	900			
31	Dimension	mm	52 x 102 x 198 (Refer to Outline Drawing)			

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

= NOTES=

* 1 : () : Peak Output Current is possible, operating period at Peak Output Current is less than 10 sec, duty less than 35% .
Average output power and current is less than Maximum Output Power and Maximum Output Current.

* 2 : At maximum output power, nominal input voltage, Ta = 25°C.

* 3 : For cases where conformance to various safety specs (EN,CQC) are required, to be described as 200 - 240VAC, 50 / 60Hz on name plate.
280VAC (max) input operation is possible.

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

* 5 : Please refer to Fig A for measurement of line & load regulation, ripple and noise voltage.
Ripple & noise are measured at 20MHz by using a twisted pair of load wires terminated with a 0.1uF and 47uF capacitor.

* 6 : 176 - 265VAC, constant load.

* 7 : No load - Full load(Maximum power), constant input voltage.

* 8 : Constant current limit with automatic recovery.
Avoid to operate at overload or dead short for more than 30seconds.

* 9 : OVP, OTP circuit will shutdown output, manual reset (Re power on).

* 10 : Measured by each measuring method of EN,CQC.

* 11 : Refer to Output Derating Curve (next page) for details of output derating
versus input voltage, ambient temperature and mounting method .
100% load start up at Vin>=200Vac at -30°C is possible.
However, it may not fulfil all the specifications.

150mm

Fig.A

Output Terminal

+V

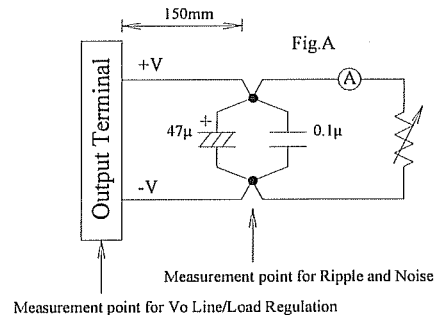
-V

47μ

0.1μ

Measurement point for Vo Line/Load Regulation

Measurement point for Ripple and Noise



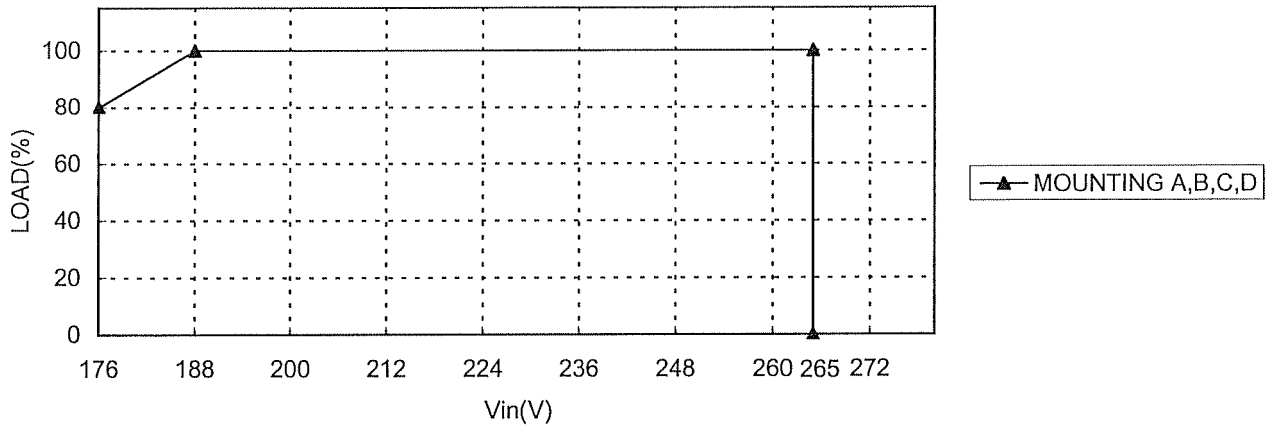
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CS300 OUTPUT DERATING VS INPUT VOLTAGE

Vin(VAC)	LOAD(%)
	Mounting A,B,C,D
176	80%
188~265	100%

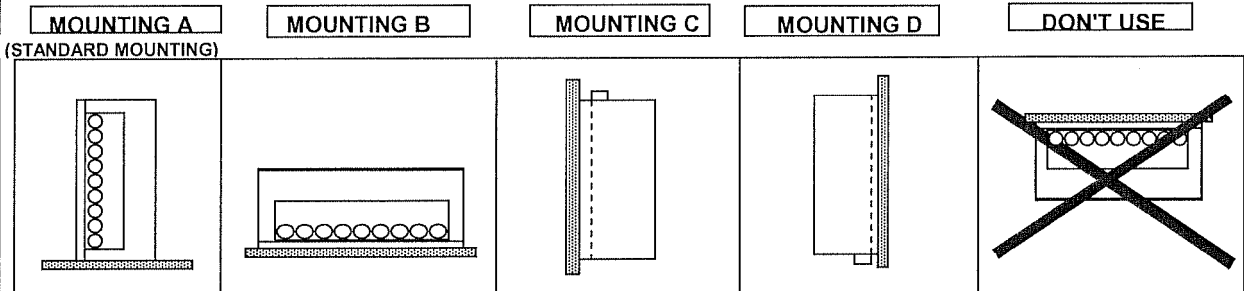
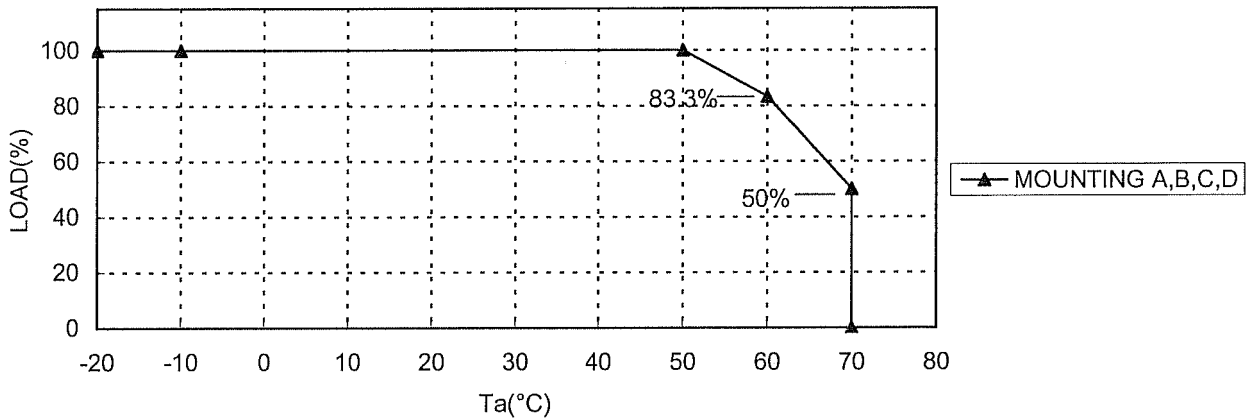
CS300 OUTPUT DERATING VS INPUT VOLTAGE CURVE



CS300 OUTPUT DERATING VS Ta

Ta(°C)	LOAD(%)
	Mounting A,B,C,D
-20~50	100%
60	83.3%
70	50%

CS300 OUTPUT DERATING VS Ta CURVE



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