CUS100MB/A

SPECIFICATIONS

CA833-01-01/A-C

	ITEMS / MODEL			CUS100 MB-5/A	CUS100 MB-12/A	CUS100 MB-15/A	CUS100 MB-18/A	CUS100 MB-24/A	CUS100 MB-28/A	CUS100 MB-36/A	CUS100 MB-48/A
1	Nominal Output Voltage		V	5	12	15	18	24	28	36	48
2	Maximum Output Current		A	12	6.7	5.4	4.5	3.4	2.9	2.25	1.7
3	Maximum Output Power		W	60.0	80.4	81.0	81.0	81.6	81.2	81	81.6
4	Efficiency	115/230 VAC (*1)	%	83 / 84	87 / 89	88 / 89	88 / 89	89 / 90	89 / 90	89 / 90	89 / 90
5	Input Voltage Range	(*2)	-	85 - 265 VAC (47-63Hz)							
6	Input Current (Typ.)	115/230 VAC (*1)	A	1.2 / 0.8	1.5 / 0.9						
7	In-rush Current (Typ.)	(*1)(*3)	A	30 / 60 at Cold Start							
8	Output Voltage Range		%	-10 / +10							
9	Maximum Ripple & Noise	(*1)(*4)(*5)	mV	120	120	150	150	150	200	200	200
10	Maximum Ripple & Noise (0%~35% Load)	(*4)(*5)	mV	240	280	280	280	280	400	400	480
11	Maximum Line Regulation	(*4)(*6)	mV	20	48	60	72	96	112	144	192
12	Maximum Load Regulation	(*4)(*7)	mV	40	96	120	144	192	224	288	384
13	No Load Power Consumption		W	< 0.5 @ 230VAC , Ta=25°C, Nominal Output Voltage							
14	Temperature Coefficient	(*4)	-	Less than 0.02% / °C							
15	Over Current Protection	(*8)	A	>16.9	> 8.7	> 7.0	> 5.8	> 4.4	> 3.7	> 2.9	> 2.2
16	Over Voltage Protection	(*9)	V	5.75 - 7.25	13.8 - 17.4	17.25 - 21.75	20.7 - 26.1	27.6 - 34.8	32.2 - 40.6	41.4 - 52.2	55.2 - 69.6
17	Hold-up time (Typ.)	(*1)	ms	15 / 90							
18	Leakage Current	(*10)	-	0.3mA max @265VAC,60Hz							
19	Parallel Operation		-	No							
20	Series Operation		-	Possible							
21	Operating Temperature	(*11)	-	-20°C ~ +70°C, start up at -30°C							
22	Operating Humidity		-	10 - 90%RH (No condensing)							
23	Storage Temperature		-	-40°C ~ +85°C							
24	Storage Humidity		-	10 - 90%RH (No condensing)							
25	Cooling		-	Convection							
26	Withstand Voltage		-	Input-FG : 2kVAC (20mA) 1xMOPP, Input-Output : 4kVAC (20mA) 2xMOPP, 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, 10-500Hz (Sweep for 1min.) Maximum 19.6m/s^2 X,Y,Z 1 hour each							
29	Shock		-	Less than 196m/s2, MIL-STD-810F							
30	Safety		-	Approved by IEC/ES/CSA/EN 60601-1(cTUVus), IEC/UL/CSA/EN 62368-1(cURus), Designed to meet GB4943.1							
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 Designed to meet IEC60601-1-2 Ed.4.1							
33	Weight (Typ.)		g	260							
34	Size (L x W x H)		mm	125 x 63.1 x 36 (Refer to Outline Drawing)							

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

=NOTES=

*1. At 115VAC/230VAC, 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 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.

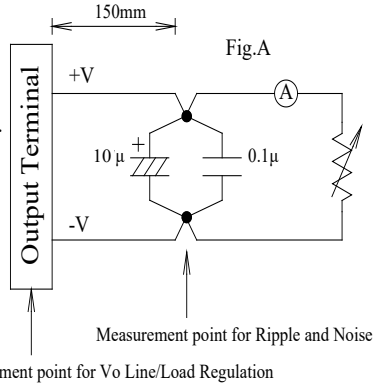
*7. No load - full load, constant input voltage.

*8. Hiccup with automatic recovery.
Avoid operating at over load or short circuit condition.

*9. OVP circuit shut down the output, manual reset (Re power 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 -30°C is possible. However, it may not fulfill all the specifications.

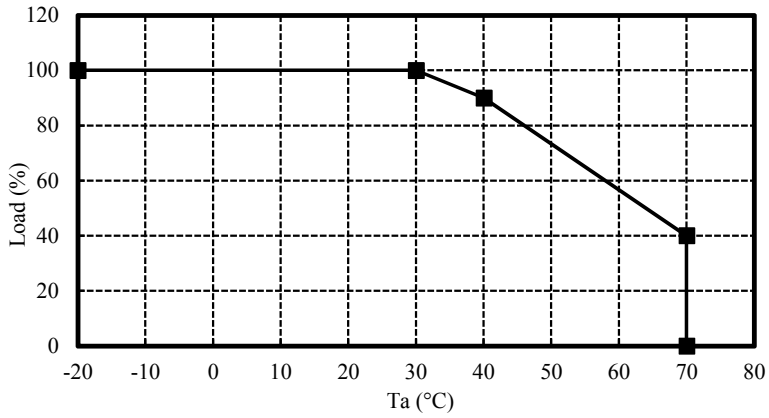


OUTPUT DERATING VERSUS OPERATING AMBIENT TEMPERATURE (Ta)

1. CUS100MB-5/A

Mounting: A, B, C, D, E

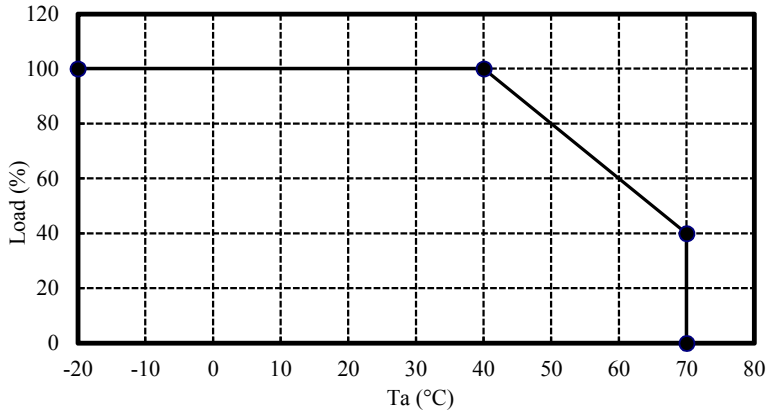
Ta (°C)	Load (%)
-20 - +30	100
40	90
70	40



2. CUS100MB-12/A, -15/A, -18/A, -24/A, -28/A, -36/A, -48/A

Mounting: A, B, C, D, E

Ta (°C)	Load (%)
-20 - +40	100
70	40



CUS100MB/A

OUTPUT DERATING

CA833-01-03/A-A

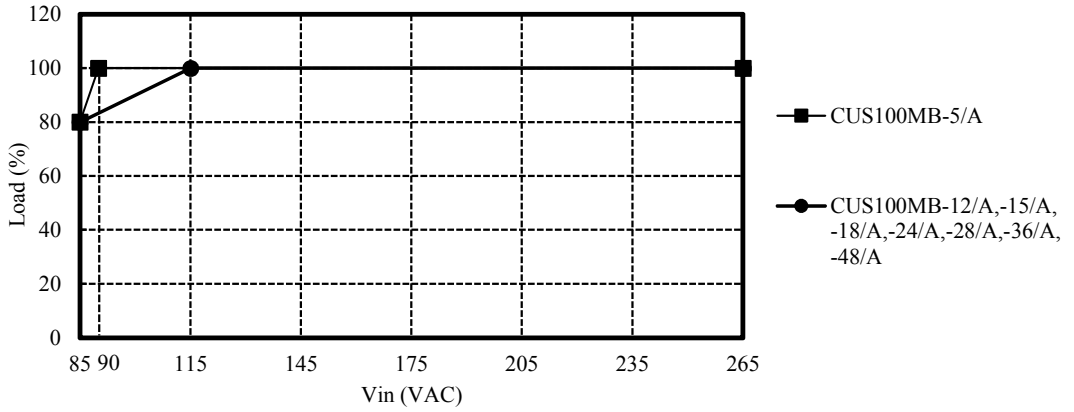
OUTPUT DERATING VERSUS INPUT VOLTAGE

CUS100MB-5/A
Mounting A,B,C,D,E

Input Voltage (VAC)	Load (%)
85	80
90~265	100

CUS100MB-12/A, -15/A, -18/A, -24/A, -28/A, -36/A, -48/A
Mounting A,B,C,D,E

Input Voltage (VAC)	Load (%)
85	80
115~265	100



MOUNTING A (STANDARD MOUNTING) | MOUNTING B | MOUNTING C | MOUNTING D | MOUNTING E