CUS1200M

SPECIFICATIONS

CA988-01-01

ITEMS / MODEL				CUS1200M-24	CUS1200M-36	CUS1200M-48
INPUT						
Input Voltage Range & Input Frequency	(*2)		-	85 - 265VAC (47 - 63Hz)		
Efficiency (Typ.)	(*12)	115VAC	%	92.5	93	93
		230VAC	%	95	95.5	95.5
Input Current (Typ.)	(*1)	115VAC	A	12	12	12
		230VAC	A	6	6	6
Inrush Current (Typ.)	(*1)(*3)	115/230VAC	A	30A / 50A at Cold Start		
Power Factor (Typ.)	(*1)	115/230VAC	-	0.99/0.95		
Leakage Current		(*10)	-	0.25mA max @ 265VAC, 60Hz		
OUTPUT						
Nominal Output Voltage			V	24	36	48
Output Voltage Initial Set Accuracy			-	+/- 1%		
Output Voltage Adjustment Range		(*1)(*4)	V	23.4 ~ 25.2	35.1 ~ 37.8	46.8 ~ 50.4
Maximum Output Current			A	50.0	33.3	25.0
Maximum Output Power			W	1200.0	1198.8	1200.0
Maximum Line Regulation		(*4)(*6)	mV	120	180	240
Maximum Load Regulation		(*4)(*7)	mV	240	360	480
Temperature Coefficient		(*4)	-	Less than 0.02% / °C		
Maximum Ripple & Noise		(*1)(*4)(*5)	mV	360	480	480
Hold-up time (Typ.)		(*1)	ms	11		
Protective function						
Over Current Protection		(*8)	A	>52.5	>35.0	>26.3
Over Voltage Protection		(*9)	V	27.6 ~ 32.4	41.4 ~ 48.6	55.2 ~ 64.8
Standby Supply						
Nominal Output Voltage (Typ.)		(*14)	V	5		
Maximum Output Current		(*14)	A	2		
FUNCTION						
Remote ON/OFF Control		(*13)	-	Possible		
Power Good		(*13)	-	Possible		
Remote Sensing		(*13)	-	Possible		
Parallel Operation			-	None		
Series Operation		(*13)	-	Possible		
ENVIRONMENT						
Operating Temperature		(*11)	-	-20 to +70°C		
Storage Temperature			-	-40 to +75°C		
Operating Humidity			-	10 to 95%RH (No condensing)		
Storage Humidity			-	10 to 95%RH (No condensing)		
Vibration		(*16)	-	At no operating, 10-55Hz (Sweep for 1min.) Maximum 19.6m/s2 X,Y,Z 1 hour each		
Shock		(*16)	-	Less than 196m/s^2		
Cooling			-	Forced air by build-in intake fan		
ISOLATION						
Withstand Voltage			-	Input-FG : 2kVAC (20mA) 1x MOPP , Input-Output : 4kVAC (20mA) 2x MOPP Output-FG : 1.5kVAC (20mA) 1x MOPP		
Isolation Resistance			-	More than 100MΩ at 25°C,70%RH, Output - FG : 500VDC		
STANDARD AND COMPLIANCE						
Safety			-	Approved by IEC/EN62368-1, UL62368-1, CSA62368-1 (Altitude :5000m) Approved by IEC/EN60601-1, ES60601-1, CSA-C22.2 No.60601-1 (Altitude :5000m)		
Conducted Emission		(*1)		Designed to meet EN55011/EN55032-B, FCC-ClassB, VCCI-B		
Radiated Emission		(*1)		Designed to meet EN55011/EN55032-B, FCC-ClassB, VCCI-B		
Harmonic Current			-	Designed to meet IEC61000-3-2,Class A		
Immunity		(*15)	-	Designed to meet IEC60601-1-2 Ed.4.1, IEC61000-4-2, -3, -4, -5, -6, -8, -11		
Line DIP			-	Designed to meet SEMI-F47 at 200VAC Only		
MECHANICAL						
Weight (Typ.)			g	980		
Size (W x H x D)			mm	187x 93 x 42.5 (Refer to Outline Drawing)		
OTHERS						
Coating			-	Optional		

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

=NOTES=

*1. At 115VAC/230VAC, 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 90VAC, 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.
*9. OVP circuit shut down the output, manual reset (Repower on) to resume 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, output voltage and ambient temperature.
- Load (%) is percent of maximum output power or maximum output current.
- Do not exceed its derating of Maximum Load for both Main Output Channel and Standby Supply.
*12. At 115VAC/230VAC, Ta=25℃, Nominal output voltage and maximum output power, and Standby Supply at no load.
*13. Refer to Instruction Manual for details.
*14. Please refer to various output derating curves for Standby Supply.
*15. Refer to Immunity Test Data for details.
*16. Fixed by the 4 mounting holes on the bottom or by the 8 mounting holes on the both sides.

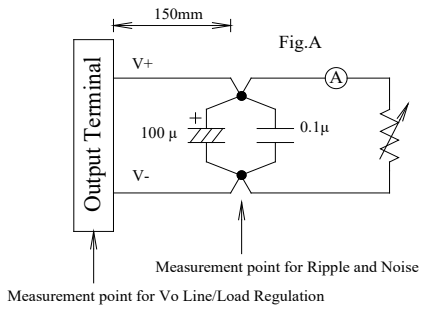

Fig.A

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OUTPUT DERATING

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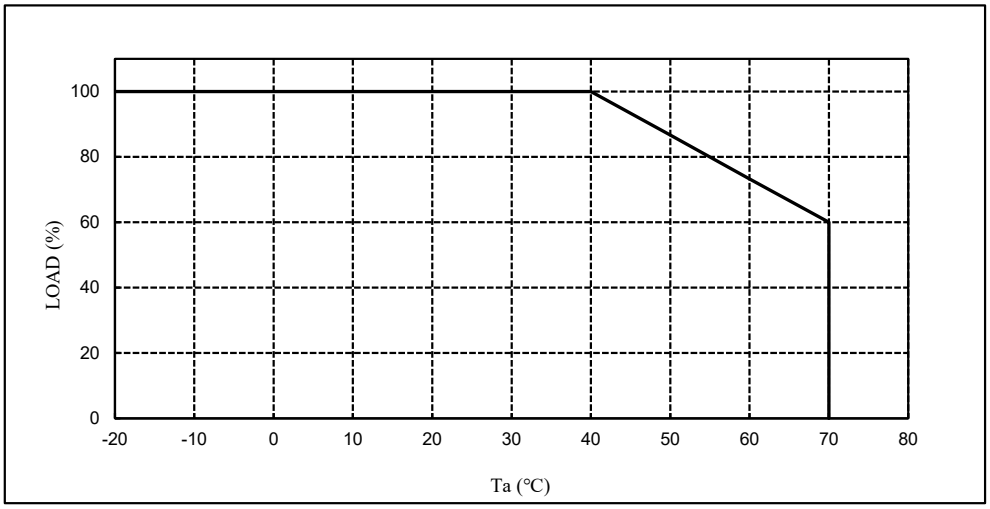
MAIN OUTPUT DERATING VERSUS OPERATING AMBIENT TEMPERATURE (Ta)

Output derating versus input voltage should be considered. Please refer to the output derating versus input voltage curve for detail.
Load (%) is percent of maximum output power or maximum output current.
If output voltage is raised higer than nominal, maximum power derating versus high output voltage shoud be considered.

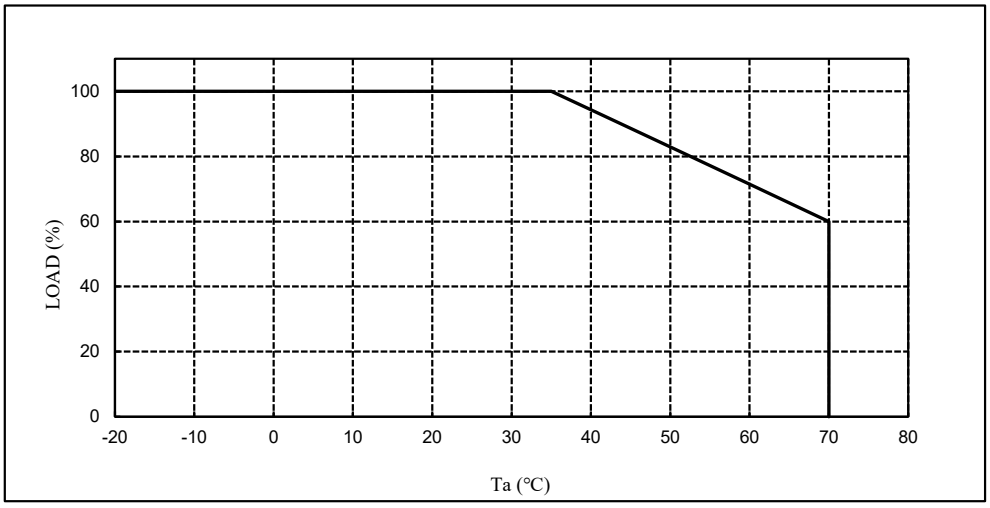
MODEL: CUS1200M-36/48

Ta (°C)	LOAD (%)
-20 - +40	100
50	86.7
60	73.3
70	60



MODEL: CUS1200M-24

Ta (°C)	LOAD (%)
-20 - +35	100
40	94.3
50	82.9
60	71.5
70	60



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OUTPUT DERATING

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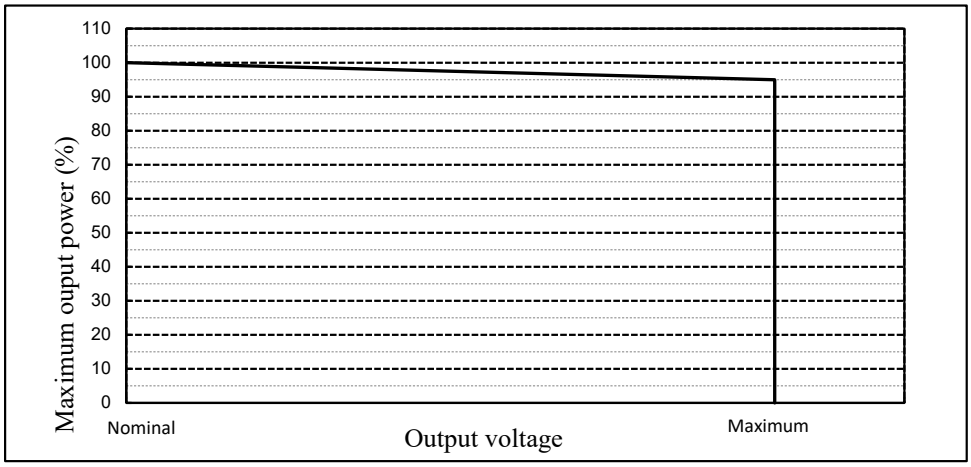
MAIN OUTPUT POWER DERATING VERSUS HIGH OUTPUT VOLTAGE

MODEL: CUS1200M-24/36/48

Output voltage	Maximium Output Power (%)
Nominal output voltage	100
Maximum output voltage	95

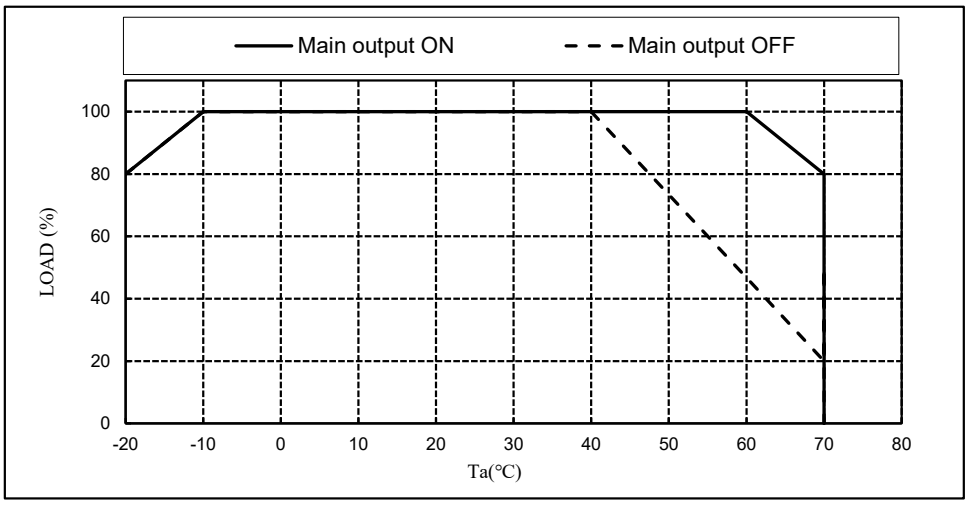


Note：The maximum voltage of each models.

Model	Maximum Output Voltage
CUS1200M-24	25.2V
CUS1200M-36	37.8V
CUS1200M-48	50.4V

STANDBY SUPPLY OUTPUT DERATING VERSUS OPERATING AMBIENT TEMPERATURE (Ta)

Ta (°C)	LOAD (%)	
	Main output ON	Main output OFF
-20	80	80
-10 ~ 40	100	100
50	100	73.3
60	100	46.7
70	80	20



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OUTPUT DERATING

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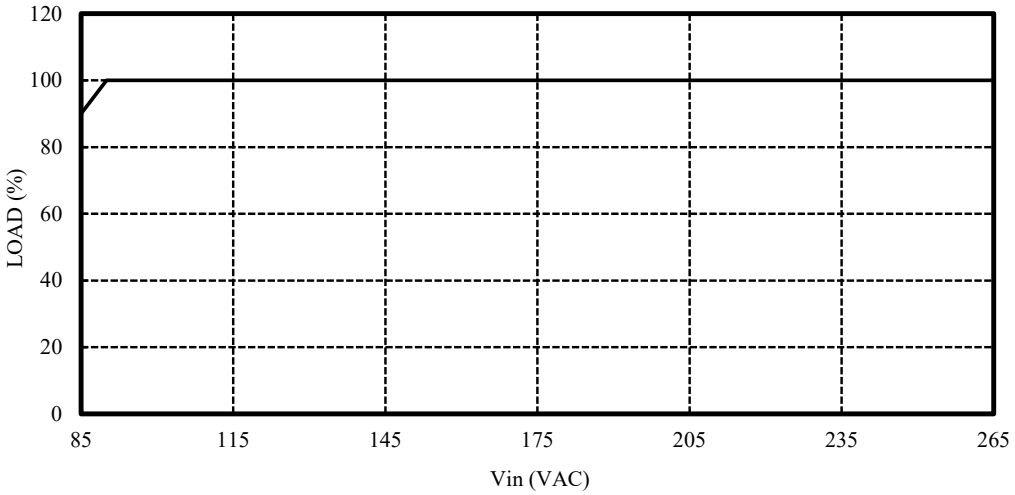
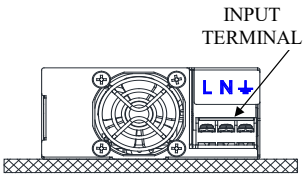
OUTPUT DERATING VERSUS INPUT VOLTAGE

INPUT VOLTAGE (VAC)	LOAD (%)
85	90
90~265	100

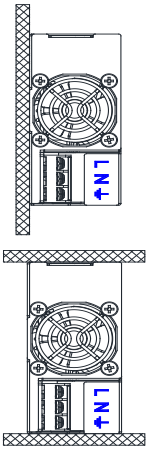


MOUNTING METHOD

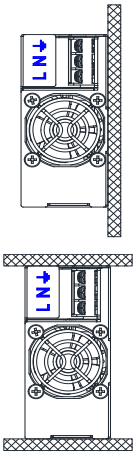
MOUNTING A
(STANDARD MOUNTING)



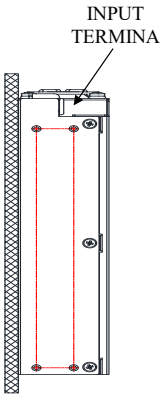
MOUNTING B



MOUNTING C



MOUNTING D



MOUNTING E