

CME60A

SPECIFICATIONS

CA885-01-01D

MODEL			CME60A	CME60A	CME60A	CME60A	CME60A	CME60A
ITEMS			-5	-12	-15	-18	-24	-48
1	Nominal Output Voltage	V	5	12	15	18	24	48
2	Maximum Output Current	A	6.0	5.0	4.0	3.35	2.5	1.25
3	Maximum Output Power	W	30.0	60.0	60.0	60.3	60	60.0
4	Efficiency (Typ.)	(*) %	81 / 81	87 / 88	87.5 / 87	88 / 88	89 / 90	90 / 91
5	No Load Power Consumption	W	< 0.5 at 265VAC , Ta=25°C, Nominal Output Voltage					
6	Input Voltage Range	(*) -	85 - 265 VAC (47-63Hz)					
7	Input Current (Typ.)	(*) A	0.7 / 0.5	1.2 / 0.8				
8	Inrush Current (Typ.)	(*)(*3) A	30 / 60 at Cold Start					
9	Output Voltage	-	Fixed Shipment condition: 5V: ±3%; 12V,15V,18V,24V,48V: ±2.5%					
10	Maximum Ripple & Noise(Ta>0°C/Ta<=0°C)(*)(*)(*)5)	mV	120 / 200	120 / 200	150 / 500	150 / 500	150 / 500	200 / 500
11	Maximum Ripple & Noise (0%~35% Load)	(*)(*)(*)5) mV	240	280	280	280	280	480
12	Maximum Line Regulation	(*)(*)(*)6) mV	20	48	60	72	96	192
13	Maximum Load Regulation	(*)(*)(*)7) mV	100	120	120	144	192	384
14	Temperature Coefficient	(*)(*) -	Less than 0.02% / °C					
15	Over Current Protection	(*)(*) -	>105% of Maximum Output Current . 12V,15V,18V,24V design to meet Class 2 limited power source					
16	Over Voltage Protection	(*)(*) -	Above 120% ~ , shutdown					
17	Hold-up time (Typ.)	(*)(*) ms	20 / 100					
18	Earth Leakage Current	(*)(*)10) -	0.2mA max at 265VAC,60Hz					
19	Parallel Operation	-	No					
20	Series Operation	-	Possible					
21	Operating Temperature	(*)(*)11) -	-20°C - +70°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	Isolation Class / Class of Protection	-	Class I (L,N,FG) or ClassII (L,N)					
26	Cooling	-	Convection Cooling					
27	Withstand Voltage	-	Input-Output : 4kVAC (20mA) 2xMOPP, Input-FG : 2kVAC (20mA) 1xMOPP, Output-FG : 1.5kVAC (20mA) 1xMOPP					
28	Isolation Resistance	-	More than 100MΩ at 25°C,70%RH, Output - FG : 500VDC					
29	Vibration	-	At no operating, 10-500Hz (Sweep for 1min.) Maximum 19.6m/s ² X,Y,Z 1 hour each					
30	Shock	-	Less than 196m/s ² , MIL-STD-810F					
31	Safety	-	Approved by IEC/EN62368-1, UL62368-1, CSA62368-1 Approved by IEC/EN60601-1, ES60601-1, CSA-C22.2 No.60601-1					
32	EMI	(*)(*) -	Designed to meet EN55011-B, EN55032-B, FCC-Class B					
33	Immunity	-	Designed to meet IEC61000-6-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8, IEC61000-4-11, IEC60601-1-2 Ed.4					
34	Line DIP	-	Designed to meet SEMI-F47 at 200VAC only					
35	Weight (Typ.)	g	120					
36	Size (L x W x H)	mm	76.2 x 50.8 x 26.7 (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 100VAC, 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 47uF capacitor.

*6. 85~265VAC, constant load.

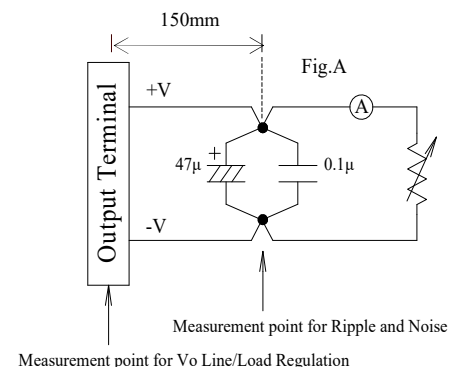
*7. No load - full load, constant input voltage.

*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.



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OUTPUT DERATING

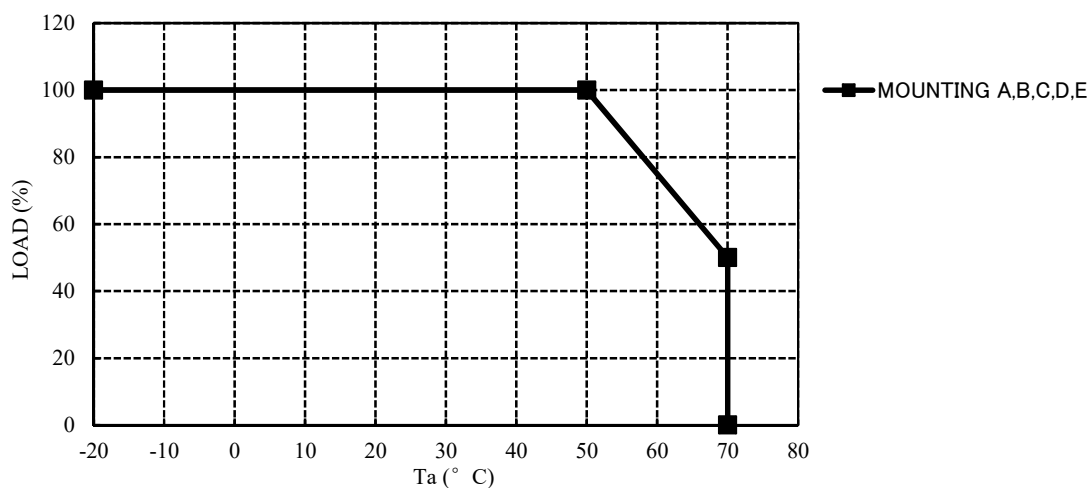
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OUTPUT DERATING VERSUS OPERATING AMBIENT TEMPERATURE (Ta)

* COOLING: CONVECTION COOLING

1. CME60A-5,18,48

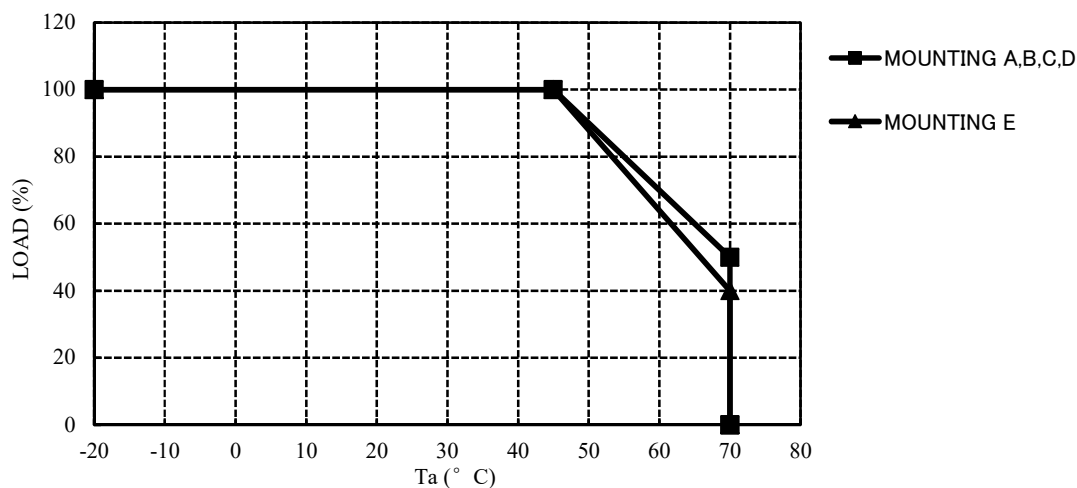
Ta(°C)	LOAD(%)
	Mounting A,B,C,D,E
-20~50	100%
70	50%



2. CME60A-12

Ta(°C)	LOAD(%)
	MOUNTING A,B,C,D
-20~45	100%
70	50%

Ta(°C)	LOAD(%)
	MOUNTING E
-20~45	100%
70	40%



CME60A

OUTPUT DERATING

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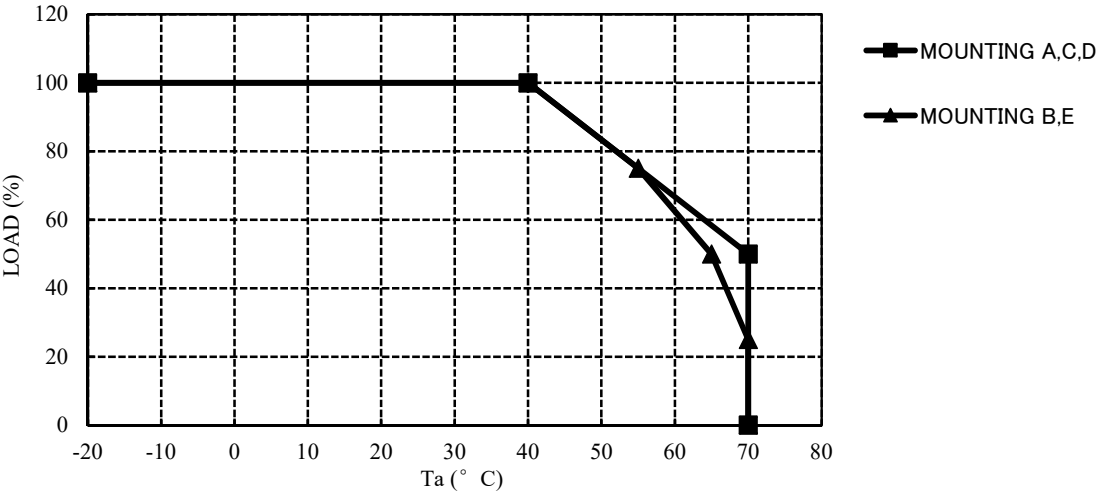
OUTPUT DERATING VERSUS OPERATING AMBIENT TEMPERATURE (Ta)

* COOLING: CONVECTION COOLING

3. CME60A-15

Ta(°C)	LOAD(%)
	MOUNTING A,C,D
-20~40	100%
70	50%

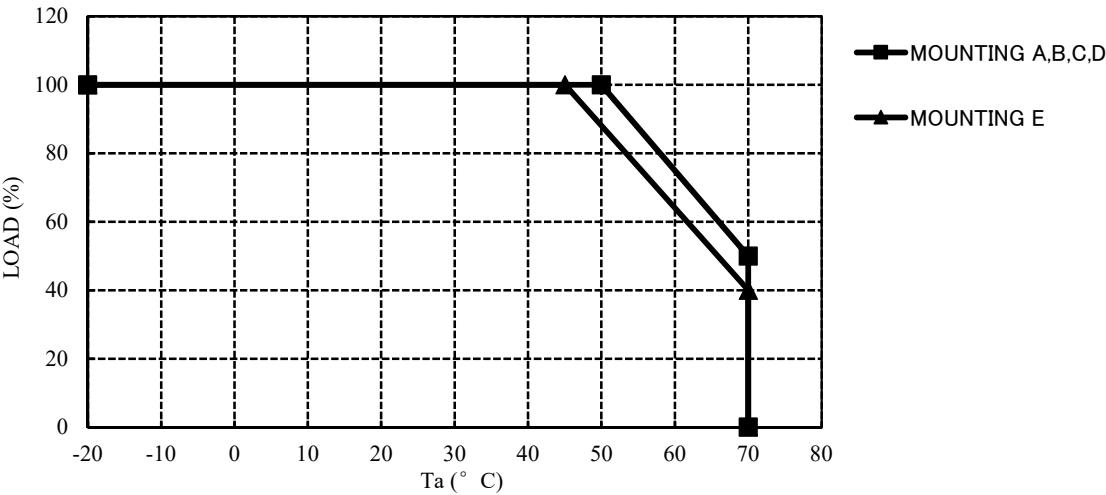
Ta(°C)	LOAD(%)
	MOUNTING B,E
-20~40	100%
55	75%
65	50%
70	25%



4. CME60A-24

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

Ta(°C)	LOAD(%)
	MOUNTING E
-20~45	100%
70	40%



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OUTPUT DERATING

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OUTPUT DERATING VERSUS INPUT VOLTAGE

* COOLING: CONVECTION COOLING

CME60A-5,12,18,24,48

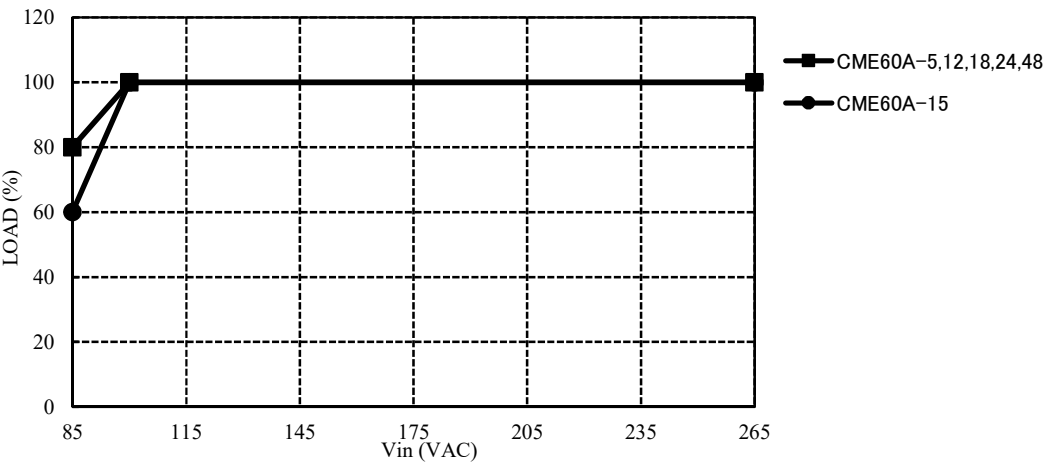
Mounting A,B,C,D,E

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

CME60A-15

Mounting A,B,C,D,E

INPUT VOLTAGE (VAC)	LOAD (%)
85	60
100~265	100



MOUNTING METHOD

