CUS15

SPECIFICATIONS

	MODEL		CUS15	CUS15	CUS15	CUS15	CUS15	REV
	ITEMS		-3	-5	-12	-15	-24	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Nominal Output Voltage	V	3.3	5	12	15	24	<u></u>
2	Maximum Output Current	Ā	3.0	3.0	1.3	1.0	0.7	
$\frac{2}{3}$	Maximum Output Power	W	9.9	15.0	15.6	15.0	16.8	<u> </u>
4	Efficiency (Typ) (*1) 100VAC		70	76	80	81	82	
"	200VAC		71	78	83	84	85	
5	Input Voltage Range (*2)(*12)				C(47-63Hz) or 1:		L	
6	Input Current (Typ) (*1)		0.24 / 0.15	1		/ 0.17		
7	Inrush Current (Typ) (*1)(*3)			5A at 100VAC,3			urt.	·
8	Output Voltage Range	V	2.97 -3.63	4.5 - 5.5	10.8 - 13.2	13.5 - 16.5	21.6 - 26.4	
9	Maximum 0≤Ta≤70°C, 35-100% Load	mV	120	120	150	150	150	
_	Ripple & -10\le Ta<0°C, 35-100\% Load		160	160	180	180	180	
1	Noise (*4)(*5) -10 <ta<70°c, 0~35%="" load<="" td=""><td></td><td>200</td><td>200</td><td>240</td><td>240</td><td>240</td><td></td></ta<70°c,>		200	200	240	240	240	
10	Maximum Line Regulation (*4)(*6)		20	20	48	60	96	<u> </u>
11	Maximum Load Regulation (*4)(*7)	mV	40	40	96	120	150	
12	No Load Power Consumption	-		Typical 0.2W	at 100VAC/200V	AC, 0.5W Max	· · · · · · · · · · · · · · · · · · ·	
13	Temperature Coefficient (*4)	-			ess than 0.02% /		***************************************	1
14	Over Current Protection (*8)	A	3.15 -	3.15 -	1.37 -	1.05 -	0.74 -	
15	Over Voltage Protection (*9)	V	4.00 - 5.25	5.75 - 7.00	13.8 - 16.2	17.3 - 20.3	27.6 - 32.4	1
16	Hold-up Time (Typ) (*1)	_	20ms					
17	Leakage Current (*10)	-	0.15/0.30mA Max. (100VAC / 230VAC 60Hz)				1	
18	Remote Control	-	-					
19	Parallel Operation	-			-			
20	Series Operation	-	<u> </u>	Possible				
21	Operating Temperature (*11)	1	Convection	on:-10-+70°C(-			70°C:40%)	
22	Operating Humidity	-		30 - 90)%RH (No Condo	ensing)		
23	Storage Temperature	-			-30 - +75°C			
24	Storage Humidity	-			5%RH (No Cond		-	
25	Cooling	-			Convection Coolin			
26	Withstand Voltage	-	Input	t - FG : 2kVAC (1			0mA)	
<u></u>					G : 500VAC (20n			
27	Isolation Resistance	-	More	than $100 M\Omega$ at 2.			00VDC	
28	Vibration	-	At no operating, 10 - 55Hz (Sweep for 1min)					
			19.6m/s ² Constant, X,Y,Z 1hour each.					
29	Shock	-	Less than 196.1m/s ²					
30	Safety	_	Approved by EN60950-1, UL60950-1, CSA60950-1 (cTUVus)			A		
31	Conducted Emission	-	Designed to meet EN55011/EN55022-B, FCC-B, VCCI-B					
32	Radiated Emission	-	Designed to meet EN55011/EN55022-B, FCC-B, VCCI-B					
33	Immunity	-	Designed to meet IEC61000-4-2(Level 3,4), -3(Level 3), -4(Level 4), -5(Level 3,4),					
			-6(Level 3), -8(Level 4), -11					
34	Weight (Typ)	g	· · · · · · · · · · · · · · · · · · ·		55			
35	/	mm			.5 (Refer to Outl	ine Drawing)		ļ
l *Re	ad instruction manual carefully, before usir	ig the	power supply uni	t.				l

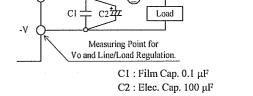
=NOTES=

- *1. At 100VAC/200VAC, Ta=25°C, nominal output voltage and maximum output power.
- *2. For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100 240VAC(50/60Hz).

Fig. A

- *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 & load regulation and ripple voltage.
- *5. For start up at low ambient temperature and low input voltage, output ripple noise might not meet specification. However, specification can be met after one second.
- *6. 85 265VAC, constant load.
- *7. No load-Full load, constant input voltage.
- *8. Current limiting (hiccup) with automatic recovery.
 - Avoid to operate at over load or short circuit condition for more than 30seconds.
- *9. OVP circuit will shut down output, manual reset (Re power on).
- *10. Measured by the each measuring method of UL, CSA, EN and DENAN(at 60Hz), Ta=25°C.
- *11. Output Deratings
 - Derating at standard mounting. Refer to output derating curve (CA826-01-02).
 - When forced air cooling, refer to derating curve(CA826-01-02_).
 - Load (%) is percent of maximum output power or maximum output current, do not exceed its derating of maximum load.

*12. Output Derating needed when input voltage less than 90VAC. Refer to output derating vs. input voltage (CA826-01-03)



Measuring Point for

Ripple & Noise.

Measure by JEITA probe.

Bandwidth of Oscilloscope: 100MHz

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MOD-STD

CUS15

OUTPUT DERATING

*COOLING: CONVECTION COOLING

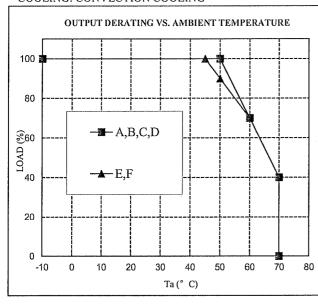
Ta (°C)	LOADING CONDITION(%)			
14(0)	Mounting A,B,C,D	Mounting E,F		
-10~45 100		100		
50	100	90		
60	70	70		
70	40	40		

*COOLING: FORCED AIR COOLING

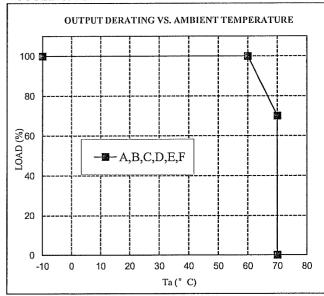
T. (9C)	LOADING CONDITION(%)		
Ta (°C)	All Mounting (A,B,C,D,E,F)		
-10~60	100		
70	70		

Air Velocity ≥ 0.7m/s: Air must flow through component side.

*COOLING: CONVECTION COOLING



*COOLING: FORCED AIR COOLING



(MOUNTING A)	(MOUNTING B)	(MOUNTING C)	(MOUNTING D)	(MOUNTING E)	(MOUNTING F)
(STANDARD MOUNTING) CN1(INPUT)	CN1(INPUT)	CN1(INPUT)	CN1(JNPUT)	CNI (INPUT)	CN1 (INPUT)

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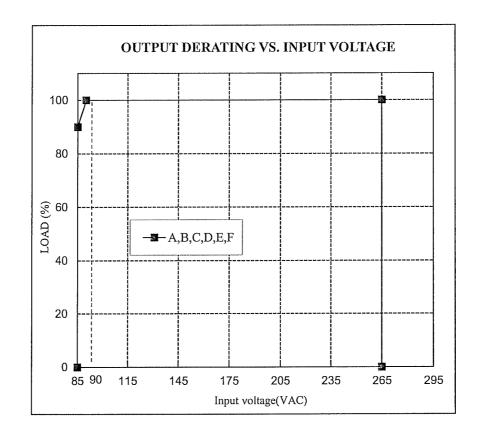
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MOD-STD	DWG No.	CA826-01-03	

CUS15

OUTPUT DERATING

Townst welltone	LOADING CONDITION(%)	
Input voltage	All Mounting (A,B,C,D,E,F)	
85VAC	90	
90VAC-265VAC	100	



(MOUNTING A)	(MOUNTING B)	(MOUNTING C)	(MOUNTING D)	(MOUNTING E)	(MOUNTING F)
(STANDARD MOUNTING) CN1(INPUT)	CN1(INPUT)	CN1(INPUT)	CN1(INPUT)	CN1 (INPUT)	CN1 (INPUT)

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