

**CPF1000F280**

**SPECIFICATIONS**

CA835-01-01A

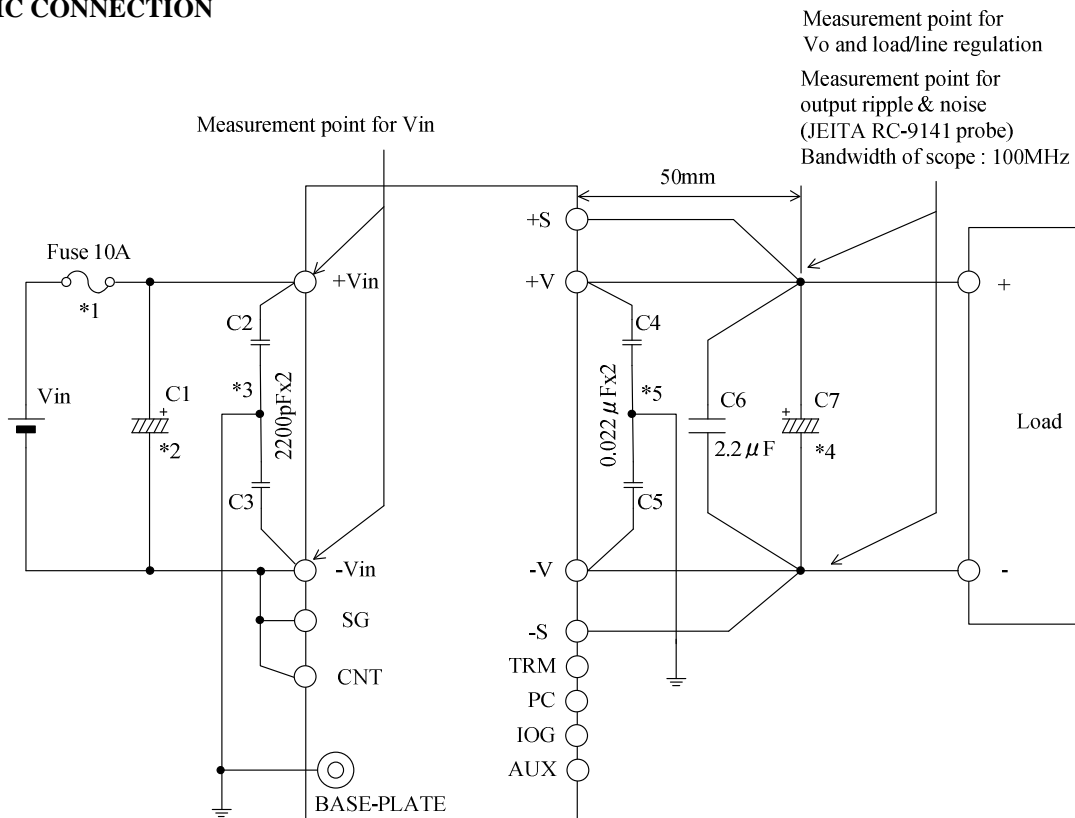
ITEMS		MODEL	CPF1000F280-14
1	Nominal Output Voltage	V	14
2	Maximum Output Current	A	72
3	Nominal Output Power	W	1008
4	Efficiency (Typ.)	(*1) %	94.5
5	Input Voltage Range	-	200 - 400VDC
6	Input Current (Typ.)	(*1) A	3.8
7	Output Voltage Accuracy	(*1) %	+/-1
8	Output Voltage Range	(*9) V	7.2 ~ 14
9	Maximum Ripple & Noise	(*9) mV	140
10	Maximum Line Regulation	(*2,*6) mV	48
11	Maximum Load Regulation	(*3) mV	48
12	Over Current Protection	(*4,*5) -	105% - 140%
13	Over Voltage Protection	(*5) V	14.88 ~ 18
14	Remote Sensing	(*8) -	Possible
15	Remote ON/OFF Control	(*8) -	Possible (SHORT:ON OPEN:OFF)
16	Parallel Operation	(*8) -	Possible
17	Series Operation	(*8) -	Possible
18	Operating Temperature	(*6) -	-40°C - +100°C (Baseplate), -40°C - +85°C (Ambient)
19	Operating Humidity	-	5 - 95%RH (No Dewdrop)
20	Storage Temperature	-	-40°C - +100°C
21	Storage Humidity	-	5 - 95%RH (No Dewdrop)
22	Cooling	(*7) -	Conduction Cooled
23	Temperature Coefficient (%)	-	0.02%/°C
24	Withstand Voltage	-	Input-Output: 3.0kVAC, Input-Baseplate: 2.5kVAC(20mA) 1min Output-Baseplate: 500VDC 1min
25	Isolation Resistance	-	Output to Baseplate 500VDC more than 100MΩ(25°C,70%RH)
26	Vibration	-	At No Operating, 10-55Hz (Sweep for 1min.) Amplitude 0.825mm Constant (Maximum 49.0m/s <sup>2</sup> ) X, Y, Z 1 hour each
27	Shock	-	196.1m/s <sup>2</sup>
28	Weight (Typ.)	g	200
29	Size (W×H×D)	mm	61 x 12.7 x 116.8 (Refer to Outline Drawing)

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

=NOTES=

- \*1. At 280VDC, Nominal Output voltage, Maximum Output Current and Baseplate Temperature = +25°C.
- \*2. 200 - 400VDC, Constant Load - Refer to Derating Curve (CA835-01-03\_).
- \*3. No load - Full load, input voltage 200 - 400VDC - Refer to Derating Curve (CA835-01-03\_).  
At light load, the power supply works in burst mode for energy saving, the maximum load regulation will be 96mV at no load, add a 100mA dummy load can achieve less than 48mV performance.
- \*4. Constant current limiting with automatic recovery.(The unit automatically shutdown when left in OCP condition, with the output voltage less than the LVP level.Refer to instruction manual.)
- \*5. Inverter shutdown method, Manual Reset.
- \*6. Ratings - Refer to Derating Curve (CA835-01-03\_).  
- Load(%) is Percent of Maximum Output Power.
- \*7. Heatsink has to be Chosen According to Instruction Manual.
- \*8. Refer to Instruction Manual.
- \*9. External Components are Needed for Operation.  
(Refer to Basic Connection and Instruction Manual)  
At light load, the power supply works in burst mode for energy saving, the maximum ripple & noise will be 240mV at no load, add a 100mA dummy load can achieve less than 140mV performance.

**BASIC CONNECTION**



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

==NOTES==

\*1. Use an external fuse (fast blow type or normal blow type) for each unit.

\*2. Put input capacitor.

C1 : Electrolytic capacitor More than 450VDC, 22 $\mu F$

1) Use low impedance electrolytic capacitor with excellent temperature characteristics.

2) Use two capacitors(450V, 22 $\mu F$ ) in parallel when ambient temperature is -20 $^{\circ}C$  or lower to reduce ESR.

3) If the impedance of input line is high, C1 capacitance must be more than above.

\*3. Put FG capacitor.

C2, C3 : Put 2200pF capacitor between input lines and baseplate (More than 3.0kVAC).

\*4. Put output capacitor.

C7 : Electrolytic capacitor

14V : 25VDC , 1500 $\mu F$  x2 Parallel

1) Use low impedance electrolytic capacitor with excellent temperature characteristics.

2) Use more than twice recommended capacitor above in parallel when ambient temperature is -20 $^{\circ}C$  or lower to reduce ESR.

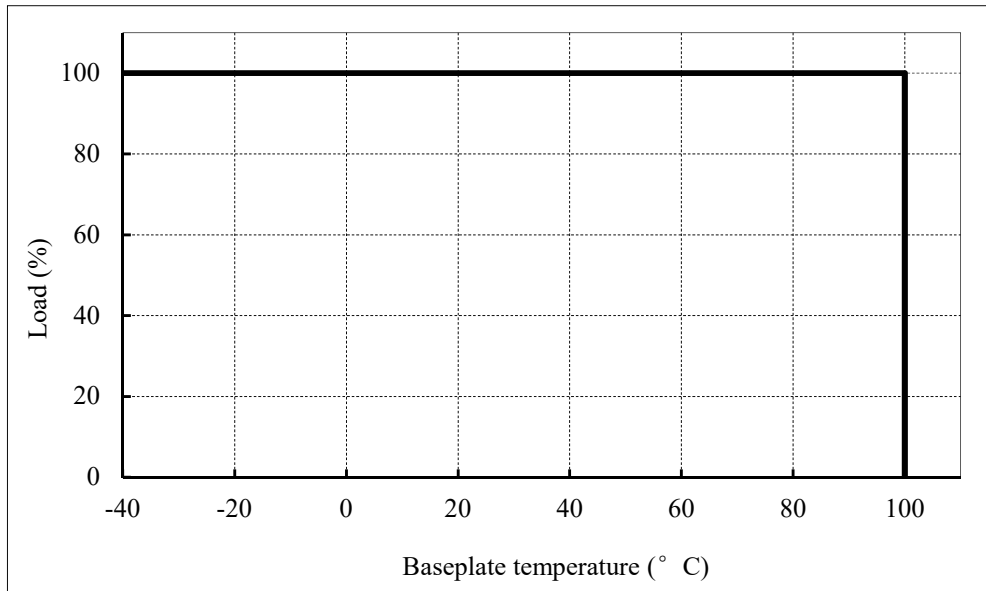
\*5. Put FG capacitor.

C4, C5 : Put 0.022 $\mu F$  capacitor between output lines and baseplate (More than 500VDC).

CA835-01-03

**DERATING CURVE :**

**Derating Curve: Tb V.S Load**



**Derating Curve: Vin V.S Output Voltage**

