PH300A280

CA836-01-01B

SPECIFICATIONS

	ITEMS / MODEL			PH300A280-5	PH300A280-12	PH300A280-24	PH300A280-28	PH300A280-48
1	Nominal Output Voltage		V	5	12	24	28	48
2	Maximum Output Current		A	60	25	12.5	10.8	6.3
3	Maximum Output Power		W	300	300	300	302.4	302.4
4	Efficiency (Typ.)	(*1)	%	89	89	90.5	91	92
5	Input Voltage Range	(*7)	VDC	200 - 425				
6	Input Current (Typ.)	(*1)	A	1.22	1.22	1.20	1.20	1.19
7	Output Voltage Accuracy	(*1)	%	-/+ 1				
8	Output Voltage Range	(*8)	%	-50 / +20	-60 / +20			
9	Maximum Ripple & Noise	(*8)	mV	100	150	240	280	480
10	Maximum Line Regulation	(*2)	mV	10	24	48	56	96
11	Maximum Load Regulation	(*3)	mV	10	24	48	56	96
12	Over Current Protection	(*4)	%	102 - 150				
13	Over Voltage Protection	(*5)(*7)	%	125 - 145				
14	Remote Sensing	(*7)	-	Possible				
15	Remote ON/OFF Control	(*7)	-	Possible (SHORT : ON OPEN : OFF)				
16	Parallel Operation		-	-				
17	Series Operation	(*7)	-	Possible				
18	Operating Temperature	(*6)(*7)	-	-40°C - +100°C (Baseplate)				
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		-	Conduction Cooled				
23	Temperature Coefficient		-	0.02%/℃				
24	Withstand Voltage	(*9)	-	Input-Baseplate : 2.5kVAC for 1min (20mA), Input-Output: 3.0kVAC for 1min (20mA). Output-Baseplate: 500VAC for 1min (20mA)				
25	Isolation Resistance		-	More than 100MΩ at 25℃ and 70%RH Output-Baseplate…500VDC				
26	Vibration		-	At No Operating, 10-55Hz (Sweep for 1min.) Amplitude 0.825mm Constant (Maximum 49.0m/s^2) X,Y,Z 1 hour each				
27	Shock		-	196.1m/s^2				
28	Safety		-	Approved by UL62368-1, CSA62368-1, EN62368-1, UL60950-1, CSA60950-1, EN60950-1 (Expire date of 60950-1 : 20/12/2020) EN62477-1(OVCIII)				
29	Weight (Typ.)		g	100				
30	Size (W x H x D)		mm	61.0 x 12.7 x 57.9 (Refer to Outline Drawing)				

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

=NOTES=

*1. At 280VDC and maximum output current.
(Baseplate Temperature = +25°C)

*2. 200 - 425VDC, Constant load.

*3. No Load - Full Load, Constant input voltage.

*4. Constant current limiting.

*5. OVP reset : Line off or Control off.

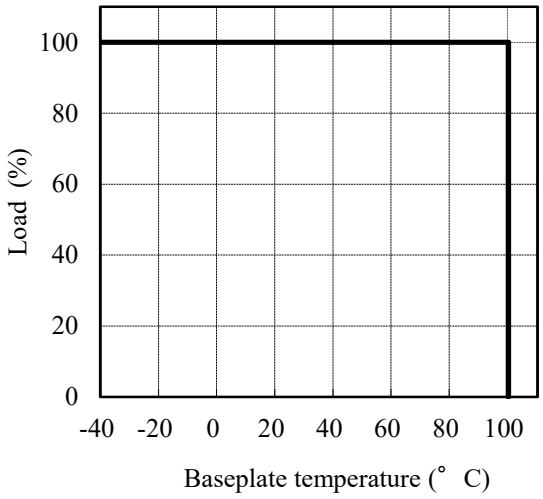
*6. Rating - Refer to Derating Curve on the right.
- Load(%) is percent of maximum output current.

*7. Refer to Instruction Manual.

*8. External components are necessary for operation.
(Refer to Basic Connection and Instruction Manual.)

*9. This specification applies to power supply module as stand-alone.

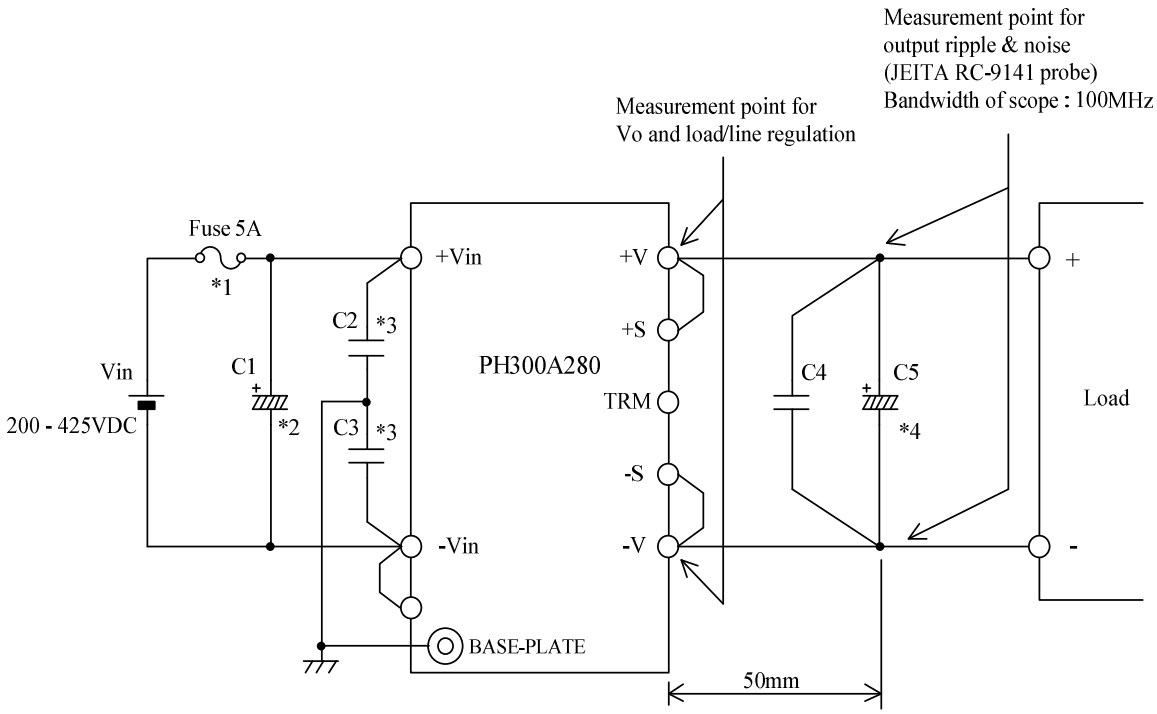
Derating Curve



PH300A280

CA836-01-02A

BASIC CONNECTION



External Components list

C1:	22uF	C5:	5V	2200uF
C2:	2200pF		12V	1000uF
C3:	2200pF		24V	470uF
C4:	2.2uF		28V	470uF
			48V	470uF x 2series

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

==NOTES==

*1. Use an external fuse for each unit.

*2. 1) Use low impedance electrolytic capacitor with excellent temperature characteristics.
2) If the impedance of input line is high, C1 capacitance must be more than 22uF.

*3. Put this capacitor as close as possible to Vin and BASE-PLATE.

*4. 1) Use low impedance electrolytic capacitor with excellent temperature characteristics.
2) If ambient temperature is -20°C or lower, use more than three recommended capacitor in parallel to reduce ESR.