

PH1200A280

SPECIFICATIONS

CA888-01-01A

ITEMS		MODEL	PH1200A280 -12	PH1200A280 -24	PH1200A280 -28	PH1200A280 -36	PH1200A280 -48
INPUT							
Input Voltage Range	(*7)	VDC	200 - 425				
Efficiency (Typ.)	(*1)	%	94	94	94	94	94
Input Current (Typ.)	(*1)	A	4.61	4.61	4.61	4.62	4.61
OUTPUT							
Nominal Output Voltage		VDC	12	24	28	36	48
Output Voltage Accuracy	(*1)	%	-/+ 1				
Maximum Output Current		A	100	50	42.9	33.4	25
Maximum Output Power		W	1200	1200	1201.2	1202.4	1200
Maximum Line Regulation	(*2)(*8)	mV	48	56	56	72	96
Maximum Load Regulation	(*3)(*8)	mV	48	56	56	72	96
Temperature Coefficient		-	0.02%/°C				
Maximum Ripple & Noise	(*8)	mV _{p-p}	260	240	280	360	480
Output Voltage Range	(*8)	VDC	7.2 - 14.4	14.4 - 28.8	16.8 - 33.6	21.6 - 43.2	28.8 - 57.6
Over Current Protection	(*4)	%	102 - 150				
Over Voltage Protection	(*5)(*7)	%	125 - 145				
FUNCTION							
Remote ON/OFF Control	(*7)	-	Possible				
Remote Sensing	(*7)	-	Possible				
Parallel Operation	(*7)	-	Possible				
Series Operation	(*7)	-	Possible				
ENVIRONMENT							
Operating Temperature	(*6)(*7)	-	-40°C - +100°C (Baseplate)				
Storage Temperature		-	-40°C - +100°C				
Operating Humidity		-	5 - 95%RH (No Condensing)				
Storage Humidity		-	5 - 95%RH (No Condensing)				
Vibration		-	At No Operating, 10 - 55Hz (Sweep for 1min.) Amplitude 0.825mm Constant (Maximum 49.0m/s ²) X,Y,Z 1 hour each				
Shock		-	196.1m/s ²				
Cooling		-	Conduction Cooled				
ISOLATION							
Withstand Voltage	(*9)	-	Input-Baseplate : 2.5kVAC for 1min (20mA), Input-Output: 3.0kVAC for 1min (20mA). Output-Baseplate: 500VAC for 1min (20mA)				
Isolation Resistance		-	More than 100MΩ at 25°C and 70%RH Output-Baseplate...500VDC				
STANDARD AND COMPLIANCE							
Safety		-	Approved by IEC/EN/UL/CSA62368-1 (Altitude ≤ 3048m)				
MECHANICAL							
Weight (Typ.)		g	200				
Size (W x H x D)		mm	61 x 12.7 x 116.8 (Refer to Outline Drawing)				

*Read Instruction Manual carefully, before using the power supply unit.

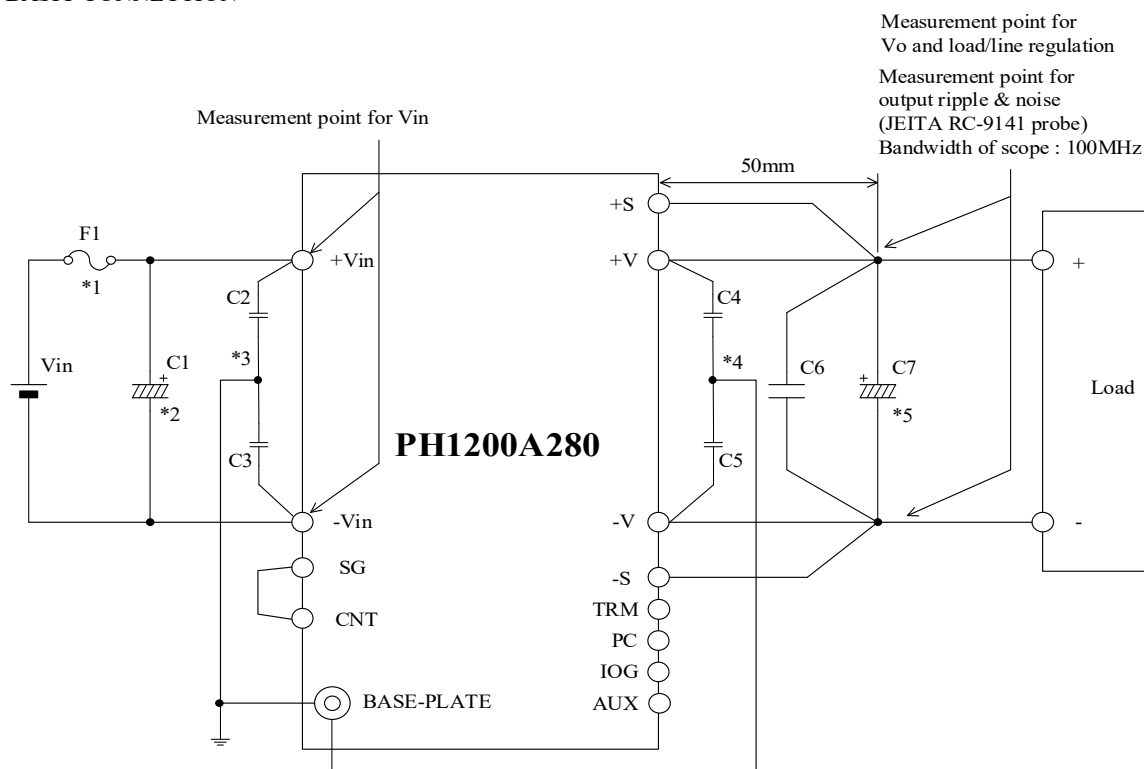
=NOTES=

- *1. At 280VDC 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, delay shut down (The unit automatically shutdown when left in OCP condition, with the output voltage less than the LVP level. Refer to Instruction Manual.)
- *5. OVP reset : Line off or Control off.
- *6. Ratings - Refer to Derating Curve (CA888-01-03_).
- 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.

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BASIC CONNECTION



External Components list

F1:	10A		12V	1500uF x2 Parallel	(Elec. Cap.)
C1:	22uF	(Elec. Cap.)	24V	1500uF	(Elec. Cap.)
C2:	4700pF	(Ceramic Cap.)	28V	1500uF	(Elec. Cap.)
C3:	4700pF	(Ceramic Cap.)	36V	560uF x2 Parallel	(Elec. Cap.)
C4:	0.022uF	(Film. Cap.)	48V	1500uF x2 Series	(Elec. Cap.)
C5:	0.022uF	(Film. Cap.)			
C6:	2.2uF	(Ceramic Cap.)			

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

==NOTES==

- *1. Use an external DC fuse (fast blow type) for each unit.
- *2. Put input capacitor.
 - 1) Use low impedance electrolytic capacitor with excellent temperature characteristics.
 - 2) Use two capacitors in parallel when ambient temperature is -20°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.
Put these capacitors as close as possible to V_{in} and BASE-PLATE.
- *4. Put FG capacitor.
Put these capacitors as close as possible to V_o and BASE-PLATE.
- *5. Put output capacitor.
 - 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°C or lower to reduce ESR.

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DERATING CURVE

Figure 1: Maximum Load Current vs. Baseplate Temperature

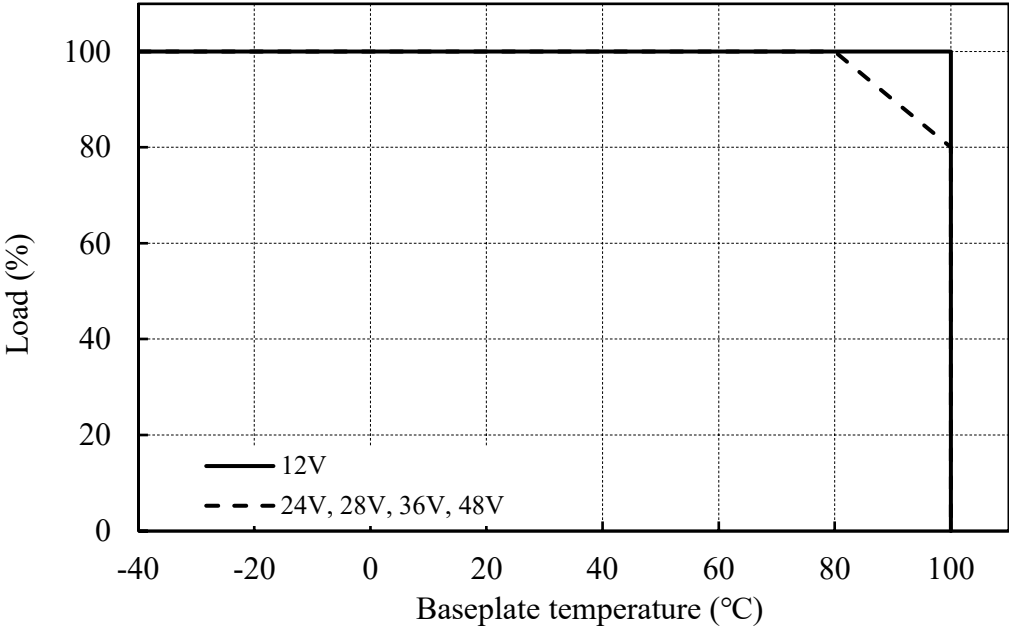


Figure 2: Maximum Output Power vs. Input Voltage

