

PH50A280

C273-01-01B

SPECIFICATIONS

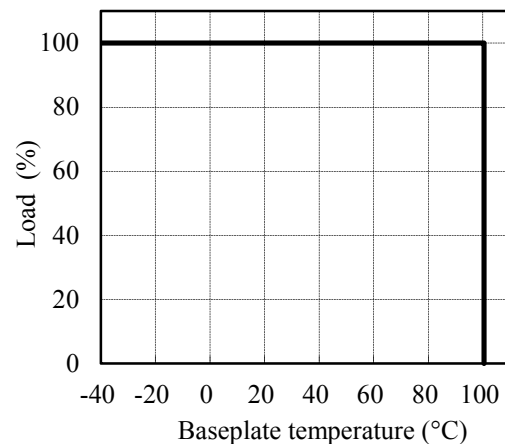
MODEL			PH50A280-5	PH50A280-12	PH50A280-24	PH50A280-48
ITEMS						
1	Nominal Output Voltage	V	5	12	24	48
2	Maximum Output Current	A	10	4.2	2.1	1.1
3	Maximum Output Power	W	50	50.4	50.4	52.8
4	Efficiency (Typ.) (*1)	%	86	89	89	89
5	Input Voltage Range	VDC	200 - 425			
6	Input Current (*1)	A	0.21	0.20	0.20	0.21
7	Output Voltage Accuracy (*1)	%	+/- 2			
8	Output Voltage Range (*8)	%	-20 / +20	-20 / +10	-20 / +10	-20 / +10
9	Maximum Ripple & Noise (*8)	mV	100	150	240	400
10	Maximum Line Regulation (*2)	mV	10	24	48	96
11	Maximum Load Regulation (*3)	mV	10	24	48	96
12	Over Current Protection (*4)	%	102 - 150			
13	Over Voltage Protection (*5)(*7)	%	125 - 150	115 - 145	115 - 145	115 - 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)	-	-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	-	Conduction Cooled			
23	Temperature Coefficient	-	0.02%/°C			
24	Withstand Voltage (*9)	-	Input-Baseplate : 2.5kVAC for 1min (20mA), Input-Output: 3.0kVAC for 1min (20mA). Output-Baseplate for 1min (20mA) : 500VAC			
25	Isolation Resistance	-	More than 100MΩ at 25°C 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 UL60950-1, CSA60950-1, EN60950-1			
29	Weight (Typ.)	g	55			
30	Size (W x H x D)	mm	37.2 x 12.7 x 58.3 (Refer to Outline Drawing)			

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

Derating Curve

=NOTES=

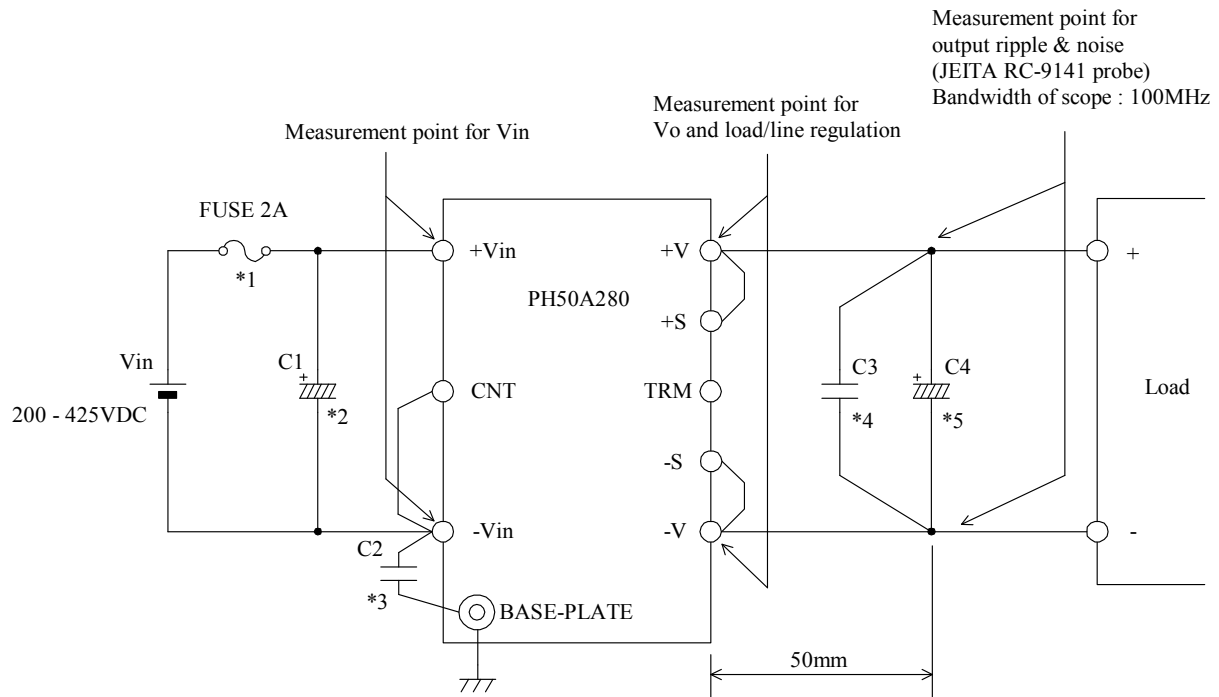
- *1. At 280VDC and maximum output current.
(Baseplate Temperature = +25°C)
- *2. 200 - 425VDC, Constant load.
- *3. No Load - Full Load, Constant input voltage.
- *4. Constant current limiting.
- *5. OVP reset : Line off or Control off.
- *6. Rating - Refer to Derating Curve on the right.
- Load(%) is percent of maximum output current.
- Refer to Instruction Manual.
- *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.



PH50A280

C273-01-02A

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, 22uF

- 1) Use low impedance electrolytic capacitor with excellent temperature characteristics.
- 2) Use two capacitors(450V, 22uF) 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.

C2 : Ceramic capacitor more than 2.5kVAC, 470pF

*4. Put output capacitor.

C3 : Ceramic capacitor 100VDC, 2.2uF

*5. Put output capacitor.

C4 : Electrolytic capacitor

C4	5V : 10VDC , 2200uF
	12V : 25VDC , 560uF
	24V : 50VDC , 220uF
	48V : 50VDC , 220uF x2series

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