

PH75A280

C272-01-01D

SPECIFICATIONS

ITEMS		MODEL	PH75A280 -3.3	PH75A280 -5	PH75A280 -12	PH75A280 -15	PH75A280 -24	PH75A280 -28	PH75A280 -48	
1	Nominal Output Voltage	V	3.3	5	12	15	24	28	48	
2	Maximum Output Current	A	15	15	6.3	5	3.2	2.7	1.6	
3	Maximum Output Power	W	49.5	75	75.6	75	76.8	75.6	76.8	
4	Efficiency (Typ.) (*1)	%	83	86	89	90	90	90	90	
5	Input Voltage Range	VDC			200 - 425					
6	Input Current (*1)	A	0.22	0.32	0.31	0.30	0.31	0.30	0.31	
7	Output Voltage Accuracy (*1)	%			-/+ 2					
8	Output Voltage Range (*8)	%	-10 / +20	-20 / +20			-20 / +10			
9	Maximum Ripple & Noise (*8)	mV	100	100	150	150	240	280	400	
10	Maximum Line Regulation (*2)	mV	10	10	24	30	48	56	96	
11	Maximum Load Regulation (*3)	mV	10	10	24	30	48	56	96	
12	Over Current Protection (*4)	%			102 - 150					
13	Over Voltage Protection (*5)(*7)	%	130 - 200	125 - 150			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 UL62368-1, CSA62368-1, EN62368-1, UL60950-1, CSA60950-1, EN60950-1 (Expire date of 60950-1 : 20/12/2020)					
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.

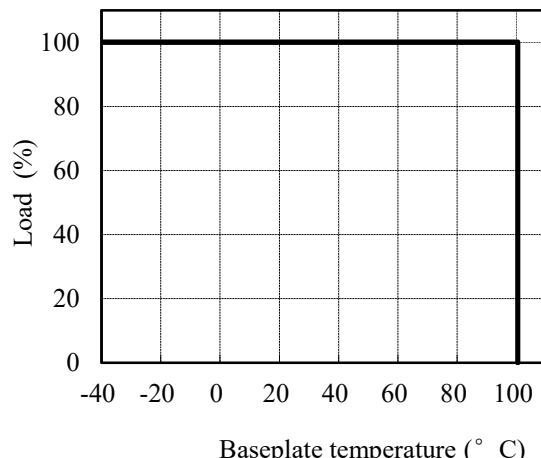
- Refer to Instruction Manual.

*7. Refer to Instruction Manual.

*8. External components are necessary for operation.

(Refer to Basic Connection and Instruction Manual.)

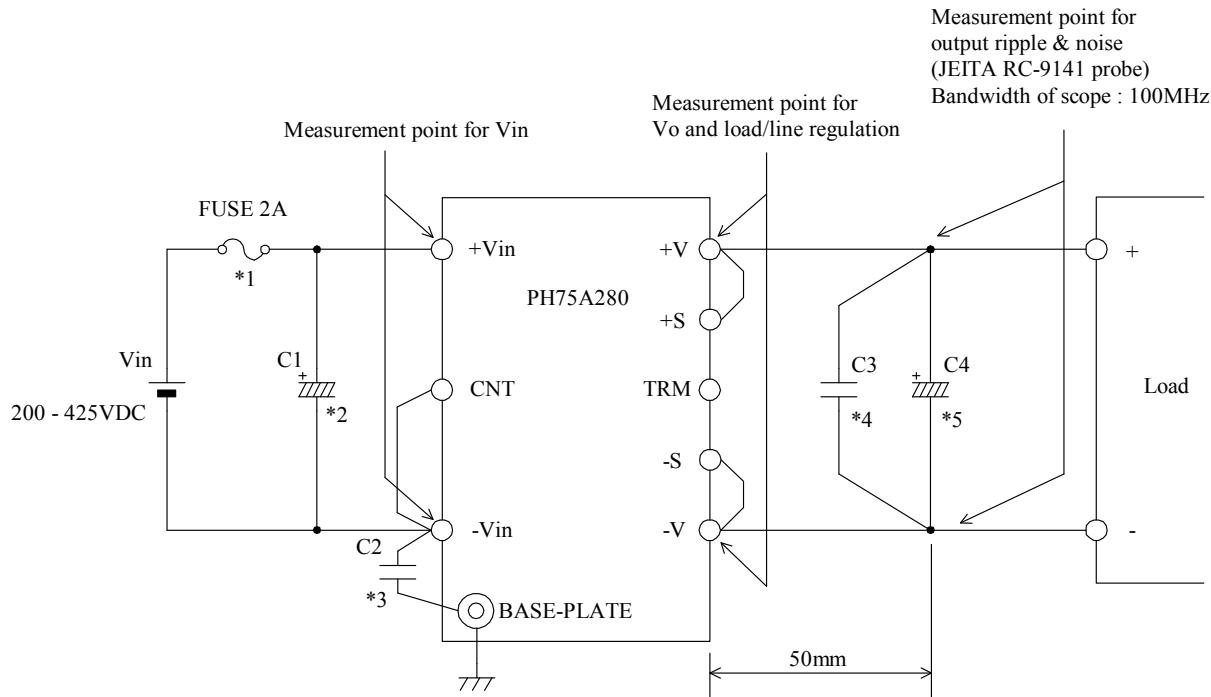
*9. This specification applies to power supply module as stand-alone.



PH75A280

C272-01-02B

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, 22μF

- 1) Use low impedance electrolytic capacitor with excellent temperature characteristics.
- 2) Use two capacitors(450V, 22μF) 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, 2.2μF

*5. Put output capacitor.

C4 : Electrolytic capacitor

C4	3.3V,5V: 10VDC , 2200μF
	12V,15V: 25VDC , 560μF
	24V,28V: 50VDC , 220μF
	48V : 50VDC , 220μF x 2 Series

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.