

**PH75A280**

C272-01-01C

**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 <sup>2</sup> ) X,Y,Z 1 hour each				
27	Shock	-				196.1m/s <sup>2</sup>				
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.

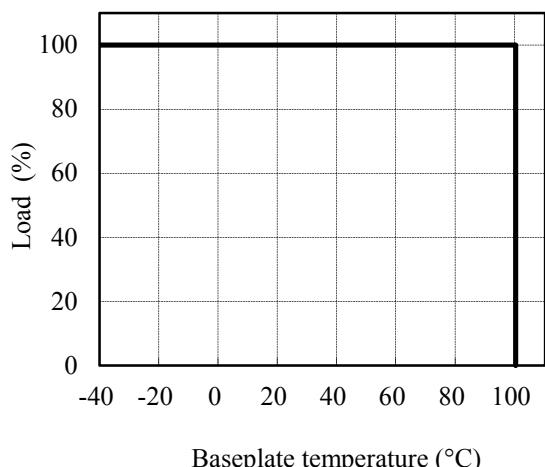
- Refer to Instruction Manual.

\*7. Refer to Instruction Manual.

\*8. External components are necessary for operation.

(Refer to Basic Connection and Instruction Manual.)

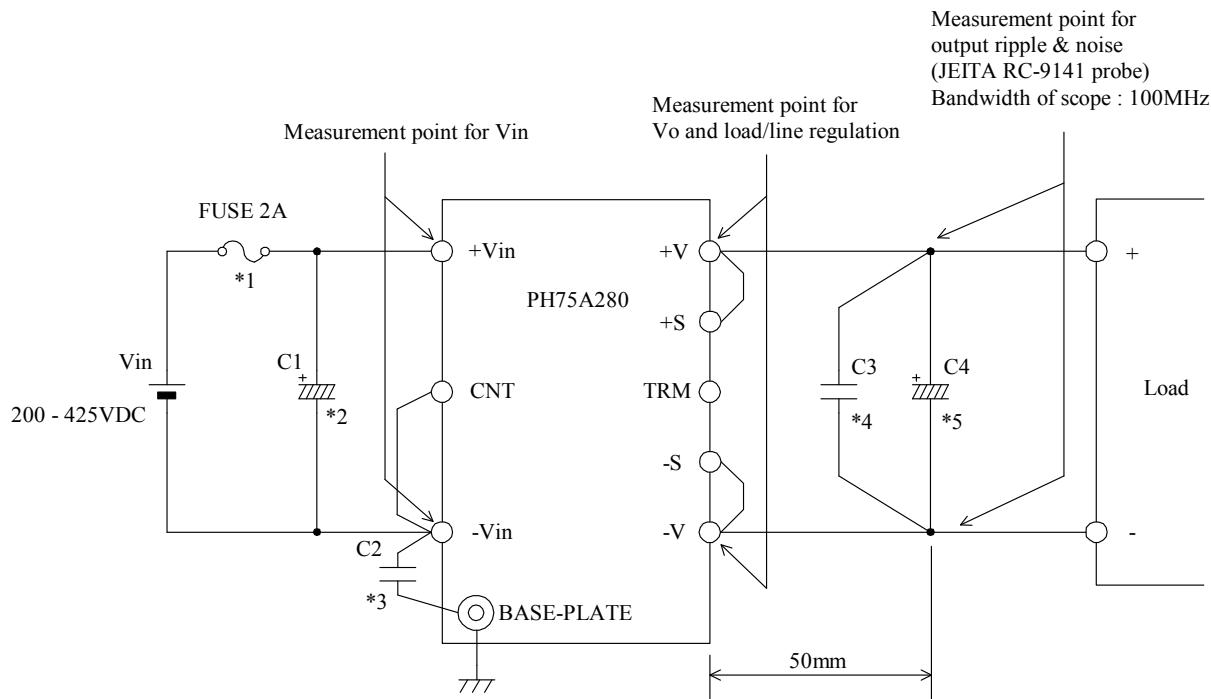
\*9. This specification applies to power supply module as stand-alone.



**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.