

**CN200A110**

SPECIFICATIONS

C257-01-01C

MODEL			CN200A110-5	CN200A110-12	CN200A110-15	CN200A110-24
ITEMS						
1	Nominal Output Voltage	V	5	12	15	24
2	Maximum Output Current	A	40	16.7	13.4	8.4
3	Maximum Output Power	W	200	200.4	201.0	201.6
4	Efficiency (Typ.)	(*1) %	85	88	88	88
5	Input Voltage Range	VDC	60 - 160			
6	Input Current	(*1) A	2.16	2.09	2.10	2.11
7	Output Voltage Accuracy	(*1) %	+/- 1			
8	Output Voltage Range	(*8) %	-10 / +20	+/- 10		
9	Maximum Ripple & Noise	(*8) mV	100	150	150	240
10	Maximum Line Regulation	(*2) mV	20	48	60	96
11	Maximum Load Regulation	(*3) mV	40	96	120	192
12	Over Current Protection	(*4) %	105 - 140			
13	Over Voltage Protection	(*5)(*7) %	125 - 145 (Inverter shutdown method)			
14	Remote Sensing	(*7) -	Possible			
15	Remote ON/OFF Control	(*7) -	Possible (SHORT : ON OPEN : OFF)			
16	Parallel Operation	(*7) -	-	Possible		
17	Series Operation	(*7) -	Possible			
18	Operating Temperature	(*6) -	-40°C - +100°C(Baseplate) Ambient Temperature min=-40°C			
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 : 2.0kVAC for 1min. (10mA), Input-Output : 3.0kVAC for 1min. (10mA) Output-Baseplate : 500VAC for 1min. (10mA)			
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 IEC61373 - Category 1 - Grade B			
27	Shock	-	196.1m/s <sup>2</sup> IEC61373 - Category 1 - Grade B			
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	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.

Derating Curve

=NOTES=

\*1. At 110VDC and maximum output current. (Baseplate Temperature = +25°C)

\*2. 60 - 160VDC, Constant load.

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

\*4. 5V delay shutdown when left in OCP condition,  
with the output voltage less than the LVP level.  
12V, 15V and 24V constant current limiting with automatic recovery.  
LVP reset : Line off or Control off.

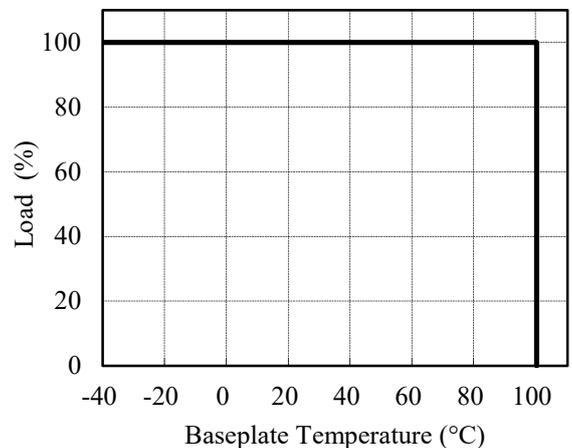
\*5. OVP reset : Line off or Control off.

\*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.)

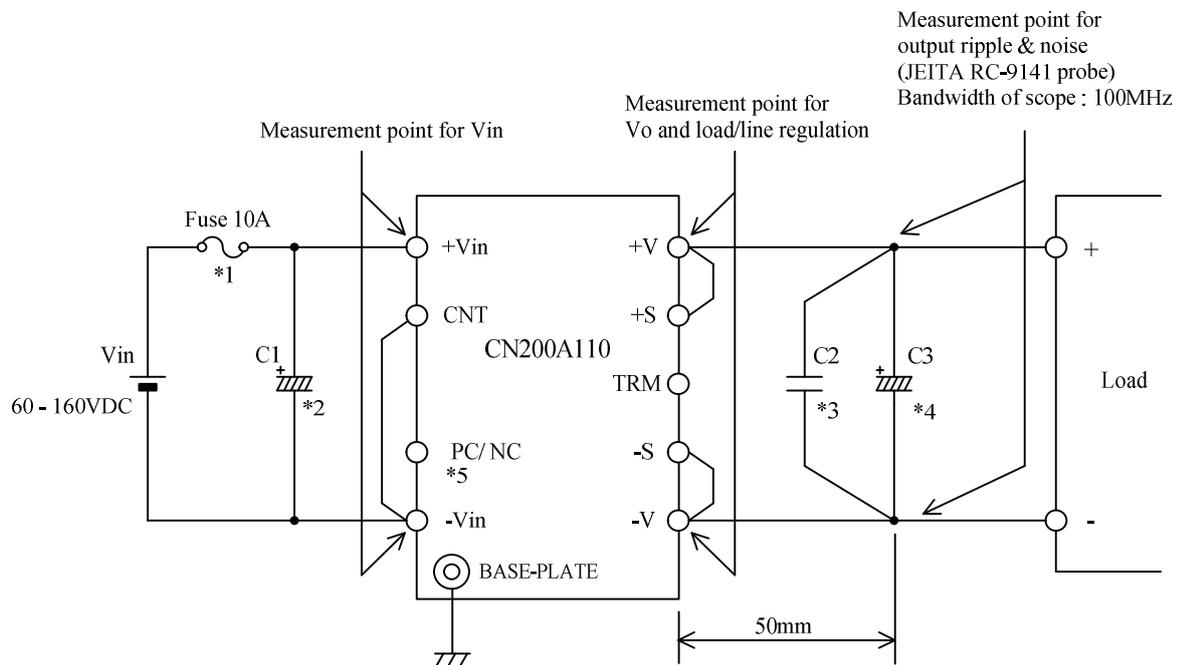
\*9. This specification applies to power supply module as stand-alone.



**CN200A110**

C257-01-02B

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 200V, 100uF

- 1) Use low impedance electrolytic capacitor with excellent temperature characteristics.
- 2) Use two series capacitors(100V, 120uF) in two parallel connection when ambient temperature is  $-20^{\circ}\text{C}$  or lower to reduce ESR.
- 3) If the impedance of input line is high, C1 capacitance must be more than above.

\*3. Put output capacitor.

C2 : Ceramic capacitor 50V, 2.2uF

\*4. Put output capacitor.

C3 : Electrolytic capacitor

C3	5V : 10V , 2200uF
	12V : 25V , 1000uF
	15V : 25V , 1000uF
	24V : 50V , 470uF

- 1) Use low impedance electrolytic capacitor with excellent temperature characteristics.
- 2) Use more than two recommended capacitor above in parallel when ambient temperature is  $-20^{\circ}\text{C}$  or lower to reduce ESR.

\*5. 5V output model : NC

12V, 15V, 24V output models : PC