

**CN300B110**

SPECIFICATIONS

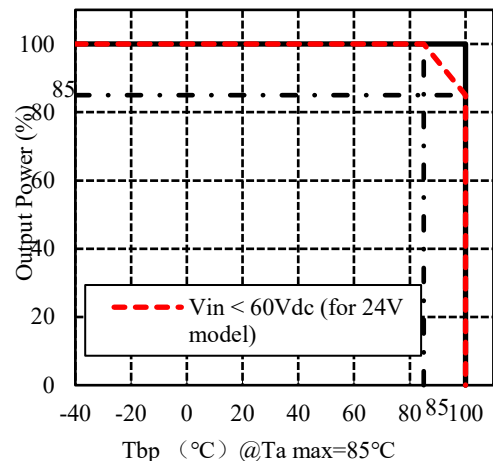
CA898-01-01C

MODEL			CN300B110-12	CN300B110-13.8	CN300B110-15	CN300B110-24
ITEMS						
1	Nominal Output Voltage	V	12	13.8	15	24
2	Maximum Output Current	A	25	21.7	20	12.5
3	Maximum Output Power	W	300	299.5	300	300
4	Efficiency (Typ.)	(*1) %	89.5	90.5	90	90
5	Input Voltage Range	(*7)(*8) VDC	43 - 160			
6	Input Current (Typ.)	(*1) A	3.1	3.0	3.1	3.1
7	Output Voltage Accuracy	(*1) %	-/+ 1			
8	Output Voltage Range	(*9) %	-20 / +20	-30 / +4	-20 / +20	-20 / +10
9	Maximum Ripple & Noise	(*9) mV	150	150	150	240
10	Maximum Line Regulation	(*2) mV	48	48	60	96
11	Maximum Load Regulation	(*3) mV	96	96	120	192
12	Over Current Protection	(*4) %	102 - 150			
13	Over Voltage Protection	(*5)(*8) %	125 - 145	109 - 126	125 - 145	115 - 135
14	Remote Sensing	(*8) -	Possible			
15	Remote ON/OFF Control	(*8) -	Possible (SHORT : ON OPEN : OFF)			
16	Parallel Operation	(*8) -	Possible			
17	Series Operation	(*8) -	Possible			
18	I.O.G Signal	(*8) -	Possible (Open Collector Output)			
19	AUX - BIAS Power supply	(*8) -	-			
20	Operating Temperature	(*6)(*8) -	-40°C - +100°C (Baseplate)			
21	Operating Humidity	-	5 - 95%RH (No Dewdrop)			
22	Storage Temperature	-	-40°C - +100°C			
23	Storage Humidity	-	5 - 95%RH (No Dewdrop)			
24	Cooling	-	Conduction Cooled			
25	Temperature Coefficient	-	0.02%/°C			
26	Withstand Voltage	(*10) -	Input-Baseplate : 2.5kVAC for 1min (20mA), Input-Output: 3.0kVAC for 1min (20mA). Output-Baseplate: 500VAC for 1min (20mA)			
27	Isolation Resistance	-	More than 100MΩ at 25°C and 70%RH Output-Baseplate...500VDC			
28	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			
29	Shock	-	196.1m/s <sup>2</sup> , IEC61373-Category 1-Grade B			
30	Safety	-	Approved by IEC/EN/UL 62368-1			
31	Weight (Typ.)	g	100			
32	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 1

=NOTES=

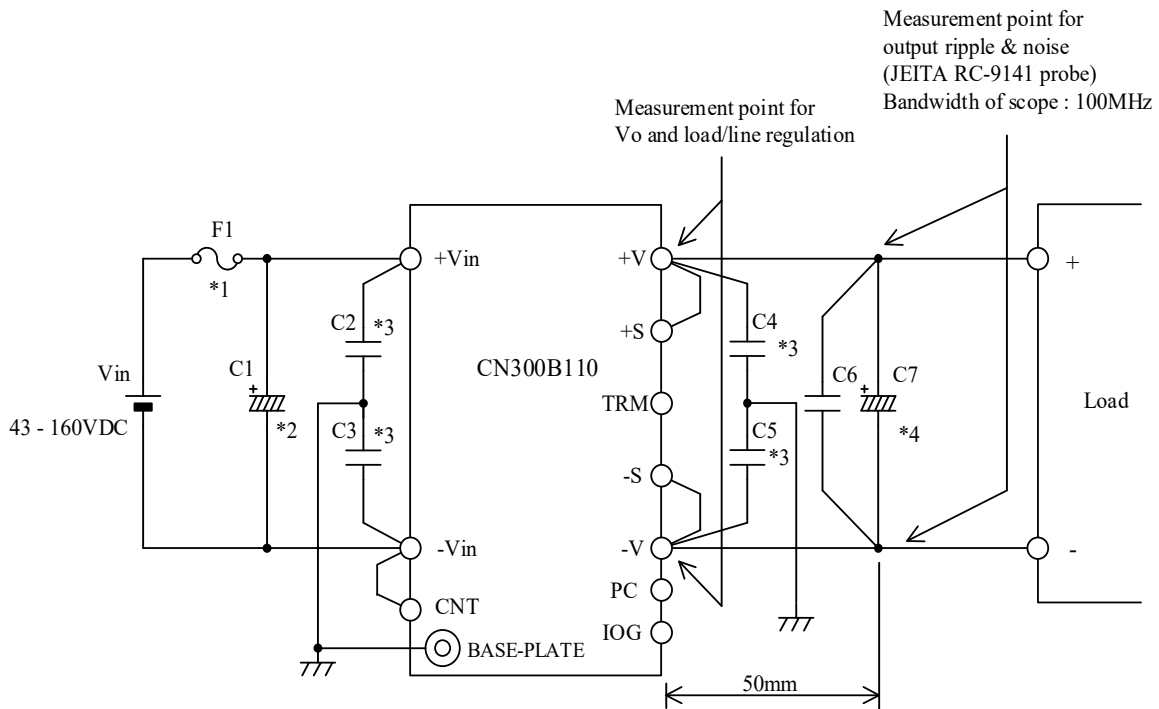
- \*1. At 110VDC and maximum output current.  
(Baseplate Temperature = +25°C)
- \*2. 43 - 160VDC, Constant load.
- \*3. No Load - Full Load, Constant input voltage.
- \*4. Constant current limiting before LVP trigger.  
Delay hiccup when left in OCP condition  
with the output voltage less than LVP level.
- \*5. Automatic recovery
- \*6. Rating - Refer to Derating Curve 1 on the right.  
- Load(%) is percent of maximum output current.
- \*7. Rating - Refer to Derating Curve 2 (CA898-01-03\_).
- \*8. Refer to Instruction Manual.
- \*9. External components are necessary for operation.  
(Refer to Basic Connection and Instruction Manual.)
- \*10. This specification applies to power supply module as stand-alone.



**CN300B110**

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BASIC CONNECTION



External Components list

F1:	20A		
C1:	220uF (Elec.)	C6:	10uF (Ceramic)
C2:	4700pF	C7:	12V 1000uF (Elec.)
C3:	4700pF		13.8V 1000uF (Elec.)
C4:	0.022uF		15V 1000uF (Elec.)
C5:	0.022uF		24V 470uF (Elec.)

\* 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. 1) Use low impedance electrolytic capacitor with excellent temperature characteristics.  
2) If the impedance of input line is high, C1 capacitance must be more than 220uF.
- \*3. Put this capacitor as close as possible to I/O terminal and BASE-PLATE.
- \*4. 1) Use low impedance electrolytic capacitor with excellent temperature characteristics.  
2) If ambient temperature is -20°C or lower, use more than three recommended capacitor in parallel to reduce ESR.

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Derating Curve 2  
Output Voltage Trim up Range Limited v.s Input Voltage

