

CN50A24

SPECIFICATIONS

C259-01-01/50-B

ITEMS		MODEL	CN50A24-5	CN50A24-12	CN50A24-24
1	Nominal Output Voltage	V	5	12	24
2	Maximum Output Current	A	10	4.2	2.1
3	Maximum Output Power	W	50	50.4	50.4
4	Efficiency (Typ.)	(*1) %	85	86	86
5	Input Voltage Range	VDC	14.4-36 (40V transient for 3sec)		
6	Input Current	(*1) A	2.48	2.47	2.47
7	Output Voltage Accuracy	(*1) %	+/- 1		
8	Output Voltage Range	(*8) %	-10 / +20	+ / -10	
9	Maximum Ripple & Noise	(*8) mV	100	150	240
10	Maximum Line Regulation	(*2) mV	20	48	96
11	Maximum Load Regulation	(*3) mV	40	96	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	-	-		
17	Series Operation	(*7) -	Possible		
18	Operating Temperature	(*6) -	-40°C - +100°C (Baseplate) Ambient Temperature Minimum=-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 Cooling		
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 ²) X,Y,Z 1 hour each IEC61373 - Category 1 - Grade B		
27	Shock	-	196.1m/s ² 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	70		
30	Size (W x H x D)	mm	36.8 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 24VDC and Maximum output current. (Baseplate Temperature = +25°C)

*2. 14.4 - 36VDC, 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(Low Voltage Protection.) level.
12V and 24V constant current limiting with automatic recovery.
LVP reset : Line off or Control off.

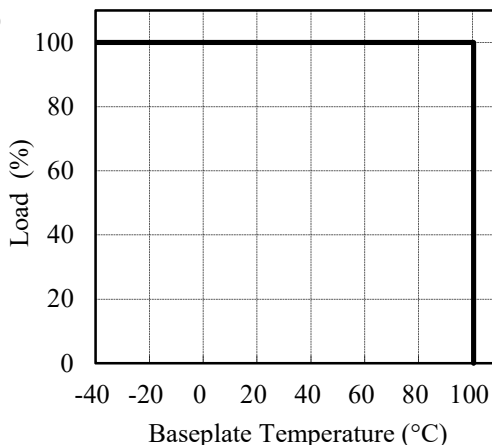
*5. OVP reset : Line off or Control off.

*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.)

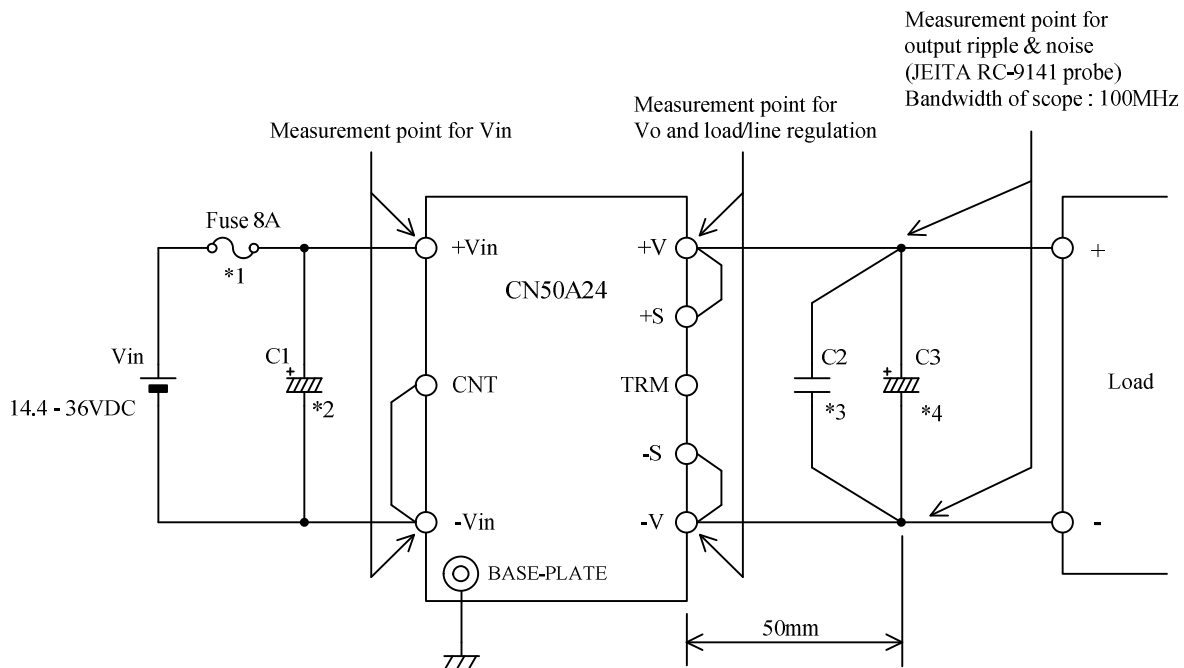
*9. This specification applies to power supply module as stand-alone.



CN50A24

C259-01-02/50

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 50V, 470uF

- 1) Use low impedance electrolytic capacitor with excellent temperature characteristics.
- 2) Use two capacitors(50V, 470uF) 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 output capacitor.

C2 : Ceramic capacitor 50V, 2.2uF

*4. Put output capacitor.

C3 : Electrolytic capacitor

C3	5V : 25V , 1000uF
	12V : 25V , 470uF
	24V : 50V , 220uF

- 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°C or lower to reduce ESR.