



■ Features :

- Universal AC input / Full range
- Built-in 5V/0.3A, 12V/0.8A auxiliary power
- Built-in active PFC function, PF>0.97
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan with fan speed control
- Output voltage can be trimmed between 40~115% of the rated output voltage
- High Power density 21.4W/inch³
- 1U low profile 41mm
- Active current sharing up to 8000W(3+1)
- Built-in remote ON-OFF control
- Built-in remote sense function
- DC OK signal, OTP alarm signal
- 3 years warranty



SPECIFICATION

MODEL		RSP-2000-12	RSP-2000-24	RSP-2000-48
OUTPUT	DC VOLTAGE	12V	24V	48V
	RATED CURRENT	100A	80A	42A
	CURRENT RANGE	0 ~ 100A	0 ~ 80A	0 ~ 42A
	RATED POWER	1200W	1920W	2016W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	200mVp-p	300mVp-p
	VOLTAGE ADJ. RANGE	10.5 ~ 14V	21 ~ 28V	42 ~ 56V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%
	LINE REGULATION	±1.0%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±0.5%	±0.5%
	SETUP, RISE TIME	1500ms, 60ms/230VAC at full load		
HOLD UP TIME (Typ.)	16ms/230VAC at 75% load 10ms/230VAC at full load			
INPUT	VOLTAGE RANGE Note.5	90 ~ 264VAC 127 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	0.97/230VAC at full load		
	EFFICIENCY (Typ.)	87%	90.5%	92%
	AC CURRENT (Typ.) Note.5	13A/115VAC 7A/230VAC	16A/115VAC 10A/230VAC	16A/115VAC 10A/230VAC
	INRUSH CURRENT (Typ.)	COLD START 50A		
	LEAKAGE CURRENT	<2mA / 240VAC		
PROTECTION	OVERLOAD	105 ~ 125% rated output power Protection type : Constant current limiting, unit will shut down o/p voltage after 5 sec. re-power on to recover		
	OVER VOLTAGE	14.7 ~ 17.5V	29.5 ~ 35V	57.6 ~ 67.2V
	OVER TEMPERATURE	80°C ±5°C (TSW1) detect on heatsink of power bridge 75°C ±5°C (TSW2) detect on heatsink of o/p diode Protection type : Shut down o/p voltage, recovers automatically after temperature goes down		
FUNCTION	AUXILIARY POWER	5V @ 0.3A, 12V @ 0.8A		
	REMOTE ON/OFF CONTROL	By electrical signal or dry contact Power ON:open Power OFF:short, refer to function manual		
	REMOTE SENSE	Compensate voltage drop on the load wiring up to 0.5V, refer to function manual		
	DC OK SIGNAL	The isolated TTL signal out, refer to function manual		
	OUTPUT VOLTAGE TRIM	Adjustment of output voltage, possible between 40 ~ 115% of rated output, refer to function manual		
ENVIRONMENT	WORKING TEMP.	-35 ~ +70°C (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes		
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH		
	EMC EMISSION	Compliance to EN55022 (CISPR22) Conduction Class B, Radiation Class A; EN61000-3-2,-3		
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61000-6-2 (EN50082-2), heavy industry level, criteria A		
OTHERS	MTBF	46.3Khrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	295*127*41mm (L*W*H)		
	PACKING	1.95Kg; 6pcs/12.7Kg/1.15CUFT		
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</p> <p>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> <p>6. Under parallel operation ripple of the output voltage may be higher than the SPEC at light load condition. It will go back to normal ripple level once the output load is more than 5%.</p>			

■ Function Description of CN501

Pin No.	Function	Description
1	+S	Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
2	-S	Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
3	PV	Connection for output voltage trimming. The voltage can be trimmed within its defined range. (Note.1)
4	GND	This pin connect to the negative terminal(-V).
5	DC-OK	High : When the $V_{out} \leq 80\% \pm 6\%$. Low : When $V_{out} \geq 80\% \pm 6\%$. (Note.2)
6	T-ALARM	High : When the internal temperature (TSW1 or TSW2 open) exceeds the limit of temperature alarm. Low : When the internal temperature (TSW1 or TSW2 short) under the limit temperature. (Note.2)
7	ON/OFF	The unit can turn the output on and off by electrical signal or dry contact. (Note.2)
8,9,10	GND-AUX	Auxiliary voltage output GND. The signal return is isolated from the output terminals (+V & -V).
11	+5V-AUX	Auxiliary voltage output, 4.5~5.5V, referenced to GND-AUX (pin). The maximum load current is 0.3A. This output has the built-in "Oring diodes" and is not controlled by the remote ON/OFF control.
12	+12V-AUX	Auxiliary voltage output, 10.6~13.2V, referenced to GND-AUX (pin). The maximum load current is 0.8A. This output has the built-in "Oring diodes" and is not controlled by the remote ON/OFF control.

Note1: Non-isolated signal, referenced to the output terminals (-V).

Note2: Isolated signal, referenced to GND-AUX.

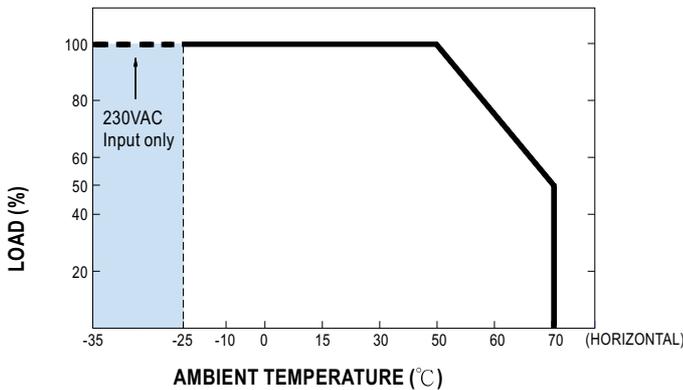
■ Function Description of CN502

Pin No.	Function	Description
1,2	DA	Differential digital signal for parallel control.
3,4	DB	Differential digital signal for parallel control.
5,6	GND	These pins connect to the negative terminal (-V).

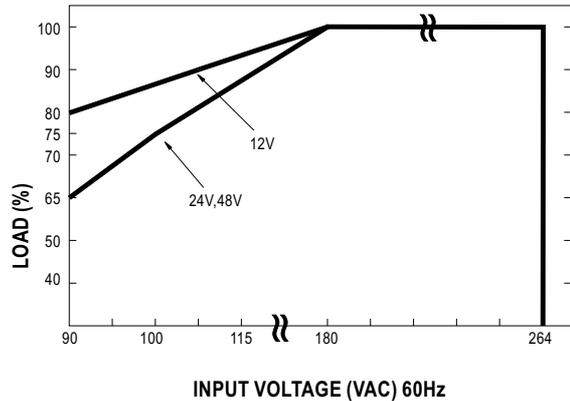
■ Function Description of CN504

Pin No.	Function	Description
1,2	Terminal resistance	CN504 is the selector of terminal resistor that is designed for DA/DB signals and parallel control function.

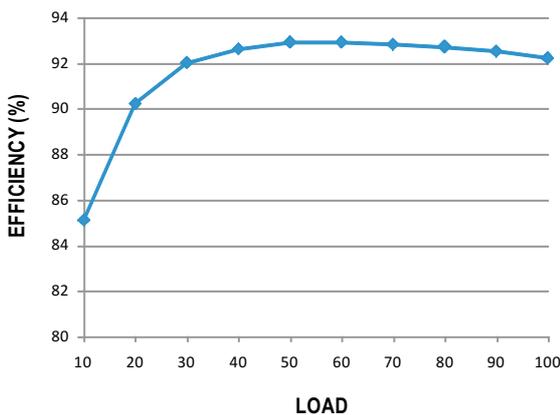
■ Derating Curve



■ Static Characteristics



■ EFFICIENCY vs LOAD (48V Model)



■ DERATING LOAD(%) VS INPUT VOLTAGE

INPUT / VOLTAGE	180VAC	115VAC	100VAC	90VAC
MODEL				
RSP-2000-12	100%	95%	90%	80%
RSP-2000-24	100%	80%	75%	65%
RSP-2000-48	100%	80%	75%	65%

Function Manual

1. Remote ON/OFF Control

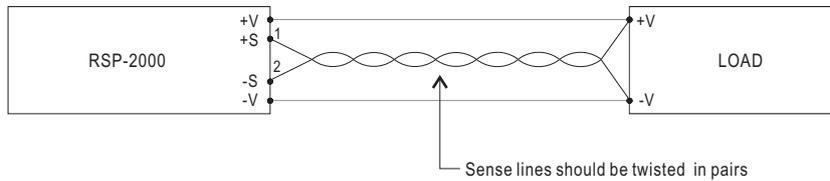
The PSU can be turned ON/OFF together or separately by using the "Remote ON/OFF" function.



Between ON/OFF and +5V-AUX	PSU Output
SW Open	ON
SW Short	OFF

2. Remote Sense

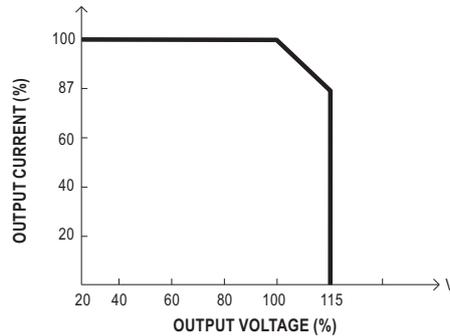
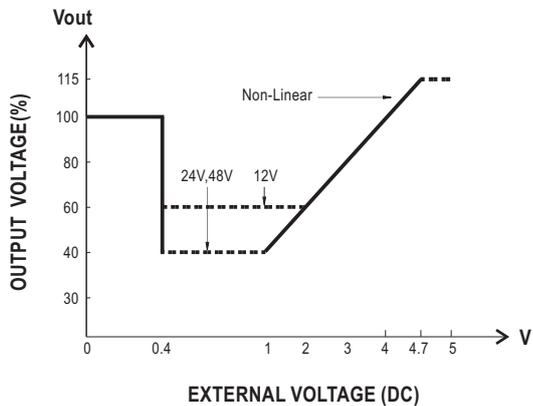
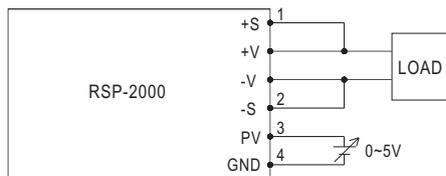
The remote sense compensates voltage drop on the load wiring up to 0.5V.



3. Output Voltage Trimming

(1) Output voltage can be trimmed between 40~115% of its rated value by the following method.

(2) +S & +V, -S & -V also need to be connected on CN501.



MODEL	PV / VOLTAGE					
	<0.4V	1V	2V	3V	4V	4.7V
RSP-2000-12	100%	60%	60%	80%	100%	115%
RSP-2000-24	100%	40%	60%	80%	100%	115%
RSP-2000-48	100%	40%	60%	80%	100%	115%

4. Front Panel Indicators & Corresponding Signal at Function Pins

Function	LED	Description	* Signal	PSU Output
DC-OK	GREEN	When output voltage $\geq 80\% \pm 5\%$ of V_o rated.	0 ~ 0.5V	ON
DC-NG	RED	When output voltage $\leq 80\% \pm 5\%$ of V_o rated.	4.5 ~ 5.5V	ON
T-OK	GREEN	When the internal temperature (TSW1 & TSW2 short) is within safe limit	0 ~ 0.5V	ON
T-ALARM	RED	When the internal temperature (TSW1 or TSW2 open) exceeds the limit of temperature alarm	4.5 ~ 5.5V	OFF

*Signal between function pin and "GND-AUX".

5. Current Sharing with Remote Sensing

RSP-2000 has the built-in active current sharing function and can be connected in parallel to provide higher output power :

- (1) Parallel operation is available by connecting the units shown as below.
(DA, DB and GND are connected mutually in parallel).
- (2) Difference of output voltages among parallel units should be less than 2%.
- (3) The total output current must not exceed the value determined by the following equation.
(output current at parallel operation) = (Rated current per unit) × (Number of unit) × 0.9
- (4) In parallel operation 4 units is the maximum, please consult the manufacturer for applications of more connecting in parallel.
- (5) The power supplies should be paralleled using short and large diameter wiring and then connected to the load.
- (6) Under parallel operation, the minimum output load should be greater than 5% of total output load.
- (7) Under parallel operation ripple of the output voltage may be higher than the SPEC at light load condition. It will go back to normal ripple level once the output load is more than 5%.
- (8) CN502/CN504 Function pin connection

Parallel	PSU1		PSU2		PSU3		PSU4	
	CN502	CN504	CN502	CN504	CN502	CN504	CN502	CN504
1 unit	X	V	—	—	—	—	—	—
2 unit	V	V	V	V	—	—	—	—
3 unit	V	V	V	X	V	V	—	—
4 unit	V	V	V	X	V	X	V	V

※ V is CN502/CN504 connected to plug pin, X is CN502/CN504 not connected to plug pin.

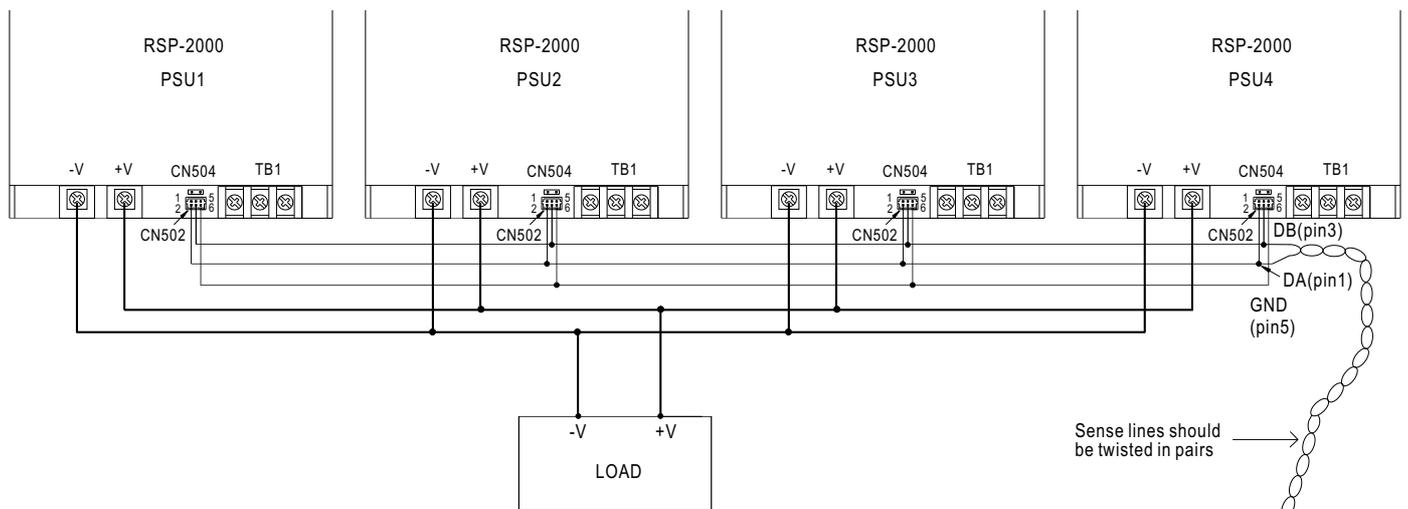
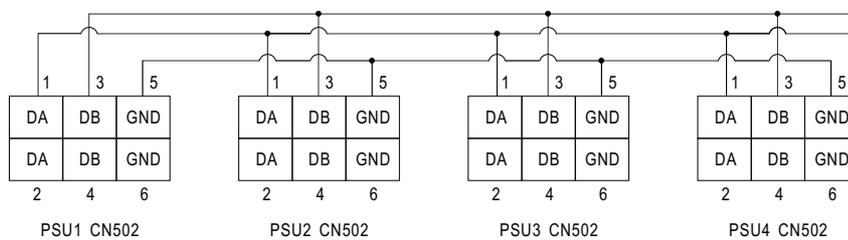


Fig 6.1





Test Report: RSP-2000-12

2000W Front End Power Supply

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

Control Function Test

Component Stress Test

■ SAFETY & E.M.C. TEST

Safety Test

E.M.C. Test

■ RELIABILITY TEST

ENVIRONMENT TEST

■ DESIGN VERIFY TEST

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	RIPPLE & NOISE	V1: 150 mVp-p (Max)	I/P: 230VAC O/P:FULL LOAD Ta:25°C	V1: 40 mVp-p (Max)	P
2	OUTPUT VOLTAGE ADJUST RANGE	CH1: 10.5 V- 14 V	I/P: 230 VAC I/P: 115 VAC O/P:MIN LOAD Ta:25°C	10.07 V- 14.32 V/ 230 VAC 10.07 V- 14.32 V/ 115 VAC	P
3	OUTPUT VOLTAGE TOLERANCE	V1: 2%- -2 % (Max)	I/P: 180VAC / 264 VAC O/P:FULL/ MIN LOAD Ta:25°C	V1: 0.15 %- -0.15 %	P
4	LINE REGULATION	V1: 1 %- -1% (Max)	I/P:180 VAC ~ 264 VAC O/P:FULL LOAD Ta:25°C	V1: 0.05 %- -0.05 %	P
5	LOAD REGULATION	V1: 1 %- -1 % (Max)	I/P: 230 VAC O/P:FULL -MIN LOAD Ta:25°C	V1: 0.1 %- -0.1 %	P
6	SET UP TIME	230VAC: 1500 ms (Max)	I/P: 230 VAC @ full load Ta:25°C	230VAC/ 1118 ms	P
7	RISE TIME	230VAC: 60 ms (Max)	I/P: 230 VAC @ full load Ta:25°C	230VAC/ 15 ms	P
8	HOLD UP TIME	230VAC: 10 ms (TYP) 230VAC: 16 ms (TYP)	I/P: 230 VAC @ full load I/P: 230VAC @75% load Ta:25°C	230VAC/ 21 ms 230VAC/ 31 ms	P
9	OVER/UNDERSHOOT TEST	< ±5%	I/P: 230 VAC O/P:FULL LOAD Ta:25°C	TEST: <5 %	P
10	DYNAMIC LOAD	V1: 1200 mVp-p	I/P: 230 VAC O/P:FULL /Min LOAD 90%DUTY/1KHZ Ta:25°C	622 mVp-p	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	INPUT VOLTAGE RANGE	180VAC-264 VAC	I/P:TESTING O/P:FULL LOAD Ta:25°C	96 V-264V	P
			I/P: LOW-LINE-3V= 177V HIGH-LINE+15%=300 V O/P:FULL/MIN LOAD ON: 30 Sec . OFF: 30 Sec 10MIN (AC POWER ON/OFF NO DAMAGE)	TEST: OK	
2	INPUT FREQUENCY RANGE	47HZ -63 HZ NO DAMAGE OSC	I/P: 180 VAC ~ 264 VAC O/P:FULL-MIN LOAD Ta:25°C	TEST: OK	P
3	POWER FACTOR	0.97 / 230 VAC(TYP)	I/P: 230 VAC O/P:FULL LOAD Ta:25°C	PF= 0.985 / 230 VAC	P
4	EFFICIENCY	87 % (TYP)	I/P: 230 VAC O/P:FULL LOAD Ta:25°C	87.6 %	P
5	INPUT CURRENT	230V/ 7 A (TYP) 115V/ 13 A (TYP)	I/P: 230 VAC @ full load I/P: 115 VAC @95% load Ta:25°C	I = 6.013 A/ 230 VAC I = 11.76 A/ 115 VAC	P
6	INRUSH CURRENT	230V/ 50 A (TYP)	I/P: 230 VAC O/P:FULL LOAD Ta:25°C	I = 42 A/ 230 VAC	P
7	LEAKAGE CURRENT	< 2 mA / 240 VAC	I/P: 240 VAC O/P:Min LOAD Ta:25°C	L-FG: 0.77 mA N-FG: 0.74 mA	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	105 %- 125 %	I/P: 230 VAC I/P: 115 VAC O/P:TESTING Ta:25°C	115 %/ 230 VAC 115 %/ 180 VAC Constant Current Limiting, unit will shut down o/p voltage after 5 sec ,re-power on to recover.	P
2	OVER VOLTAGE PROTECTION	CH1: 14.7 V~ 17.5V	I/P: 230 VAC I/P: 115 VAC O/P:MIN LOAD Ta:25°C	15.802 V/ 230 VAC 15.763 V/ 115 VAC Shunt down Re- power ON	P
3	OVER TEMPERATURE PROTECTION	SPEC: TSW1: 80 ± 5°C O.T.P. TSW2: 75 ± 5°C O.T.P. NO DAMAGE	I/P: 230 VAC O/P:FULL LOAD	O.T.P. Active Shut down o/p voltage , recovers automatically after temperature goes down	P
4	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P: 264 VAC O/P:FULL LOAD Ta:25°C	NO DAMAGE Constant Current Limiting, unit will shut down o/p voltage after 5 sec ,re-power on to recover.	P

CONTROL FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT																					
1	AUXILIARY POWER (AUX)	5V @ 0.3A (4.5V~ 5.5V) 12V @ 0.8A (10.6V~13.2V)	I/P: 230 VAC O/P:FULL LOAD Ta:25°C	5.018 V 11.282V	P																					
2	REMOTE ON/OFF	ON/OFF/+5V-AUX SHORT : POWER OFF ON/OFF/+5V-AUX OPEN : POWER ON	I/P: 230 VAC O/P:FULL LOAD Ta:25°C	SHORT : POWER OFF OPEN : POWER ON	P																					
3	REMOTE SENSE	Compensate voltage drop on the load wiring up to 0.5V	I/P: 230 VAC O/P:FULL LOAD Ta:25°C	> 0.5 V	P																					
4	DC OK Signal	HIGH:VOUT ≤ 80±6%Vout LOW:VOUT ≥ 80±6%Vout	I/P: 230 VAC O/P:FULL LOAD Ta:25°C	HIGH : 5.332 V , VO ≤ 80.33 %Vout LOW: 0 V, VO ≥ 84.16 %Vout	P																					
5	Output voltage TRIM	DC<0.4V Vo/p=100%±3% DC=1V Vo/p=60%±3% DC=2V Vo/p=60%±3% DC=3V Vo/p=80%±3% DC=4V Vo/p=100%±3% DC=4.7V Vo/p=115%±3%	I/P: 230 VAC Ta:25°C	<table border="1"> <thead> <tr> <th>PV=</th> <th><0.4V</th> <th>1V</th> <th>2V</th> <th>3V</th> <th>4V</th> <th>4.7V</th> </tr> </thead> <tbody> <tr> <td>Vout=</td> <td>101%</td> <td>58.45%</td> <td>59.48%</td> <td>77.76%</td> <td>100%</td> <td>115.05%</td> </tr> <tr> <td>LOAD</td> <td>0~100% load</td> <td>0~100% load</td> <td>0~100% load</td> <td>0~100% load</td> <td>0~100% load</td> <td>0~85.7% load</td> </tr> </tbody> </table>	PV=	<0.4V	1V	2V	3V	4V	4.7V	Vout=	101%	58.45%	59.48%	77.76%	100%	115.05%	LOAD	0~100% load	0~100% load	0~100% load	0~100% load	0~100% load	0~85.7% load	P
PV=	<0.4V	1V	2V	3V	4V	4.7V																				
Vout=	101%	58.45%	59.48%	77.76%	100%	115.05%																				
LOAD	0~100% load	0~100% load	0~100% load	0~100% load	0~100% load	0~85.7% load																				
6	OVER TEMP WARNING	T-ALARM TSW1 & TSW2 short(0~0.5V) TSW1 or TSW2 open(4.5V~5.5V)	I/P: 230 VAC O/P:FULL LOAD Ta:25°C	TSW1 & TSW2 short : 0 V TSW1 or TSW2 open : 5.343 V	P																					
7	FAN SPEED CONTROL	<table border="1"> <thead> <tr> <th>Fan Speed</th> <th>Load</th> <th>PWM Duty</th> </tr> </thead> <tbody> <tr> <td>LOW</td> <td>0%</td> <td>10%±5%</td> </tr> <tr> <td>HIGH</td> <td>100%</td> <td>90%±5%</td> </tr> </tbody> </table>	Fan Speed	Load	PWM Duty	LOW	0%	10%±5%	HIGH	100%	90%±5%	I/P: 230 VAC O/P:TESTING Ta:25°C	<table border="1"> <thead> <tr> <th>Fan Speed</th> <th>Load</th> <th>PWM Duty</th> </tr> </thead> <tbody> <tr> <td>LOW</td> <td>0%</td> <td>10.50%</td> </tr> <tr> <td>HIGH</td> <td>100%</td> <td>91.75%</td> </tr> </tbody> </table>	Fan Speed	Load	PWM Duty	LOW	0%	10.50%	HIGH	100%	91.75%	P			
Fan Speed	Load	PWM Duty																								
LOW	0%	10%±5%																								
HIGH	100%	90%±5%																								
Fan Speed	Load	PWM Duty																								
LOW	0%	10.50%																								
HIGH	100%	91.75%																								
8	CURRENT SHARING	PSU1-PSU2 < 10%	I/P : 230 VAC O/P : 100%/50% LOAD Ta : 25°C	O/P : 100% LOAD PSU1 : 100A PSU2 : 97A PSU3 : 103A PSU4 : 99.8A <hr/> O/P : 50% LOAD PSU1 : 50.5A PSU2 : 48A PSU3 : 52.5A PSU4 : 48.5A	P																					

6	VIBRATION TEST	1 Carton & 1 Set (1) Waveform: Sine Wave (2) Frequency:10~500Hz (3) Sweep Time:10min/sweep cycle (4) Acceleration:2G (5) Test Time:1 hour in each axis (X.Y.Z) (6) Ta:25°C	TEST : OK	P
---	----------------	--	-----------	---

SAFETY TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P: 3 KVAC/min I/P-FG: 1.5 KVAC/min O/P-FG: 0.5 KVAC/min	I/P-O/P: 3.6 KVAC/min I/P-FG: 1.8 KVAC/min O/P-FG: 0.6 KVAC/min Ta:25°C	I/P-O/P: 10.94 mA I/P-FG: 8.54 mA O/P-FG: 11.61 mA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ I/P-FG: 500VDC>100MΩ O/P-FG:500VDC>100MΩ	I/P-O/P: 500 VDC I/P-FG: 500 VDC O/P-FG: 500 VDC Ta:25°C	I/P-O/P: 19.1 GΩ I/P-FG: 17.1 GΩ O/P-FG: 24 GΩ NO DAMAGE	P
3	GROUNDING CONTINUITY	FG(PE) TO CHASSIS OR TRACE < 100 mΩ	40 A / 2min Ta:25°C	6 mΩ	P

E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	HARMONIC	EN61000-3-2 CLASS A CLASS D	I/P: 220/230/240 VAC/60HZ O/P:100%75%50%25% LOAD Ta:25°C	PASS	P
2	CONDUCTION	EN55022 CLASS B	I/P: 230 VAC (50HZ) O/P:FULL/50% LOAD Ta:25°C	PASS Test by certified Lab	P
3	RADIATION	EN55022 CLASS A	I/P: 230 VAC (50HZ) O/P:FULL LOAD Ta:25°C	PASS Test by certified Lab	P
4	E.S.D	EN61000-4-2 INDUSTRY AIR:8KV / Contact:4KV	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25°C	CRITERIA A	P
5	E.F.T	EN61000-4-4 INDUSTRY INPUT: 2KV	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25°C	CRITERIA A	P
6	SURGE	IEC61000-4-5 INDUSTRY L-N :2KV L,N-PE:4KV	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25°C	CRITERIA A	P
7	Test by certified Lab & Test Report Prepare				

M.T.B.F & LIFE CYCLE CALCULATION

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	CAPACITOR LIFE CYCLE	RSP-2000-24 : SUPPOSE C110 IS THE MOST CRITICAL COMPONENT I/P: 230VAC O/P:FULL LOAD Ta= 25 °C LIFE TIME= 595726 HRS I/P: 230VAC O/P:FULL LOAD Ta= 50 °C LIFE TIME=98887 HRS I/P: 230VAC O/P:75% LOAD Ta= 50 °C LIFE TIME= 173473HRS I/P: 230VAC O/P:50% LOAD Ta= 50 °C LIFE TIME= 259367HRS			P
2	MTBF	MIL-HDBK-217F NOTICES2 PARTS COUNT TOTAL FAILURE RATE: 46.3 K HRS			P
3	DMTBF/Accelerated Life Test	Demonstration Mean Time Between Failure : Above 30,000 hours @ TA 50°C			P

COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	Power Transistor (D to S) or (C to E) Peak Voltage	Q900 Rated FCP22N60N 22A/600V	I/P : High-Line +3V = 267 V O/P : (1)Full Load Turn on (2) Output Short (3)Full load continue Ta : 25°C	(1) 434 V (2) 438 V (3) 432 V	P
2	Diode Peak Voltage	Q100 Rated STP160N75F3 120A/75V	I/P : High-Line +3V = 267 V O/P : (1)Full Load Turn on (2) Output Short (3)Full load continue Ta : 25°C	(1) 47.2 V (2) 33.2 V (3) 42 V	P;
		Q103 Rated STP160N75F3 120A/75V	I/P : High-Line +3V = 267 V O/P : (1)Full Load Turn on (2) Output Short (3)Full load continue Ta : 25°C	(1) 43.4 V (2) 39.6 V (3) 39 V	P
3	Input Capacitor Voltage	C5 Rated 330u/400V 105°C 30*30 VXH	I/P:High-Line +3V = 267 V O/P: (1)Full Load Turn on /Off (2) Min load Turn on /Off (3)Full Load /Min load Change Ta:25°C	(1) 378.89 V (2) 380.99 V (3) 384.73 V	P
4	Control IC Voltage Test	U2 Rated PWM UCC28220D 8.4V~14.5V	I/P:High-Line +3V = 267 V O/P: (1)Full Load Turn on /Off (2) Min load Turn on /Off (3)Full Load /Min load Change Ta:25°C	(1) 13.163 V (2) 11.941 V (3) 13.266 V	P
5	Power Transistor (D to S) or (C to E) Peak Voltage	Q603 Rated STP30N65M5 22A/650V	I/P : High-Line +3V = 267 V O/P : (1)Full Load Turn on (2) Output Short (3)Full load continue Ta : 25°C	(1) 422 V (2) 414 V (3) 416 V	P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2011/8/22	RD SAMPLE	PASS	SANFORD SU	VINCENT TSENG
2011/9/6	PRODUCT SAMPLE	PASS	SANFORD SU	VINCENT TSENG
2011/10/19	PRODUCT SAMPLE W1110B21	PASS	SANFORD SU	VINCENT TSENG

