Test Report: NPP-750-12

750W High Reliable Ultra Wide Output Range Battery Charger & Power Supply 2-in-1

■ 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

Battery Charger mode

■ DESIGN VERIFY TEST

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	BOOST CHARGE VOLTAGE	14.4V± 0.24 V	I/P: 230 VAC O/P: CC=90% LOAD Ta:25℃	14.37 V
2	FLOAT CHARGE VOLTAGE	13.8V± 0.12 V	I/P: 230 VAC O/P:NO LOAD Ta:25℃	13.79V
3	MAX. OUTPUT CURRENT	43A± 0.43 A	I/P: 230 VAC O/P:C.V MODE-1V Ta:25℃	43.11 A
4	MAX. POWER	722.4W	I/P: 230 VAC O/P:C.V =16.8V Ta:25℃	721.1W
5	OUTPUT VOLTAGE ADJUST RANGE	10.5 V~ 21 V	I/P： 230 VAC O/P：CC=90% LOAD Ta：25℃	9.98V~22.01V
6	CURRENT ADJUSTABLE RANGE	21.5~43A	I/P： 230 VAC O/P：C.V MODE-1V Ta：25℃	20.6A~45.4A

PROTECTION FUNCTION TEST

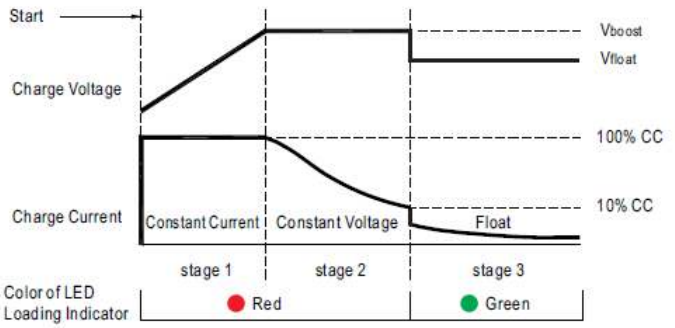
NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE Constant current Range： 43A±10% PROTECTION TYPE： Constant current limiting, charger will shut down after 5 sec, re-power on to recover	I/P: 264 VAC O/P: BAT. LOAD Ta:25℃	NO DAMAGE Constant current Range： 43.05 A PROTECTION TYPE： Constant current limiting, charger will shut down after 5 sec, re-power on to recover
2	OVER VOLTAGE PROTECTION	21.5V~26V PROTECTION TYPE： Shut down and latch off o/p voltage, re-power on to recover	I/P: 264VAC I/P: 230VAC I/P: 90VAC O/P:MIN LOAD Ta:25℃	24.3V/ 264VAC 24.3V/ 230VAC 24.3V/ 90VAC PROTECTION TYPE： Shut down and latch off o/p voltage, re-power on to recover
3	OVER TEMPERATURE PROTECTION	Protection type： Shut down O/P voltage, recovers automatically after	I/P: 264VAC I/P: 90VAC O/P:FULL LOAD	O.T.P. Active PROTECTION TYPE： Shut down O/P voltage,

		temperature goes down		recovers automatically after temperature goes down

CONTROL FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	FAN CONTROL	Depends on internal temperature	I/P: 230 VAC O/P:BAT. LOAD Ta:25℃	TEST: OK
2	REMOTE CONTROL	Rc+ / Rc- OPEN(-0.5V~0.5V) : Charger OFF ; SHORT(10.8V~13.2V) : Charger ON	I/P: 230 VAC O/P:BAT. LOAD Ta:25℃	OPEN /SHORT TEST: OK Charger OFF: -0.5V~1.75V Charger ON: 1.8V~13.2V (1) Remote off Pin= 2.44W (2) Remote off Vo= 0.1V
3	CHARGE OK	The TTL signal out, Charger OK = 4.5 ~ 5.5V; Charger failure or protection = -0.5 ~ 0.5V	I/P: 230 VAC O/P:BAT. LOAD Ta:25℃	TEST: Charger OK = 5.19 V; Charger failure or protection = 0.03 V
4	BATTERY OK	The TTL signal out, Battery full = 4.5 ~ 5.5V . Charging = -0.5 ~ 0.5V	I/P: 230 VAC O/P:BAT. LOAD Ta:25℃	TEST: Battery full = 5.17 V Charging = 0.02 V
5	AUX POWER	OUTPUT VOLTAGE RANGE : 10.8~13.2V OUTPUT RIPPLE&NOISE: 240mVp-p	I/P: 230 VAC O/P:BAT. LOAD Ta:25℃	TEST: 11.86 V 19 mVp-p
6	CHARGING CURVE	I/P:230Vac O/P:TESTING Ta:25℃		

◎ 3 stage charging curve (Default)



Taper Current	4.3A±0.43A
Io	4.19A

7	LED INDICATOR	<table><tr><th>LED Indicator</th><th>Charger(Default)</th><th>Power Supply</th></tr><tr><td>Green</td><td>Float stage(stage 3) or full charged</td><td>Normal working</td></tr><tr><td>Red</td><td>Charging(stage 1 or 2)</td><td>——</td></tr><tr><td>NO Light</td><td>Abnormal</td><td>Abnormal</td></tr></table> I/P: 230V O/P:TESTING LOAD Ta:25℃	TEST : OK

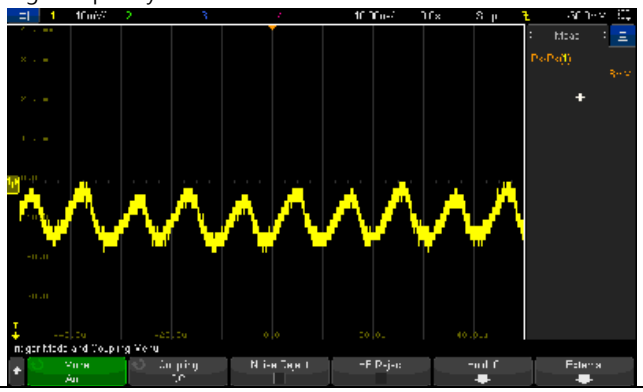
Power Supply mode

■ DESIGN VERIFY TEST

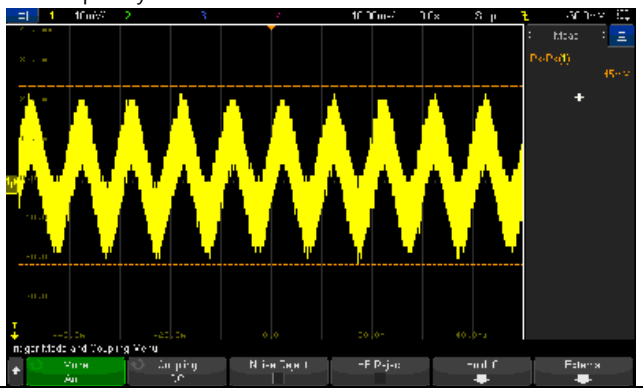
OUTPUT FUNCTION TEST

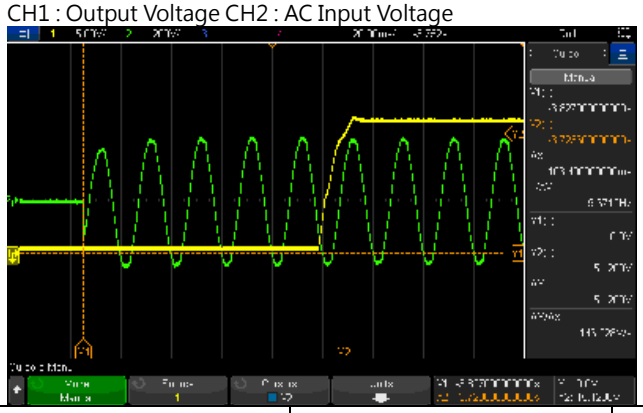
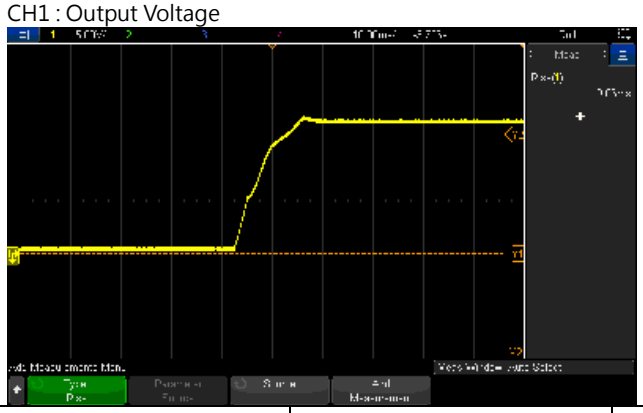
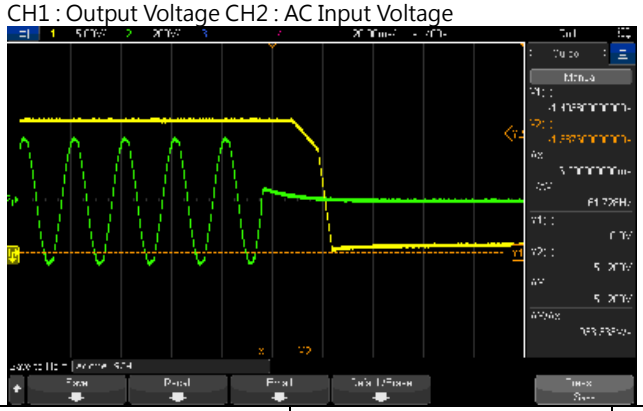
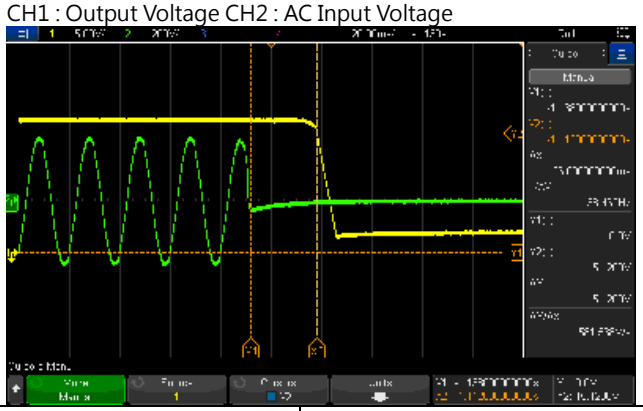
NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OUTPUT VOLTAGE ADJUST RANGE	CH1: 10.5 V~ 21 V	I/P : 230 VAC I/P : 115 VAC O/P : MIN LOAD Ta : 25℃	10.11V~22.06V/230VAC 10.11V~22.06V/115VAC
2	OUTPUT VOLTAGE(Max) TOLERANCE	V1: -1.0 %~ +1.0 %	I/P: 90VAC /264VAC O/P:FULL/ MIN. LOAD Ta:25℃	V1: -0.18%~ 0.18 %
3	LINE REGULATION (Max)	V1: -0.5 %~ +0.5 %	I/P: 90VAC~ 264VAC O/P:FULL LOAD Ta:25℃	V1: -0.01%~ 0.01 %
4	LOAD REGULATION(Max)	V1: -1.0 %~ +1.0 %	I/P: 230VAC O/P:FULL ~MIN LOAD Ta:25℃	V1: -0.18%~ 0.18 %
5	OVER/UNDERSHOOT TEST	< ±5%	I/P: 230VAC O/P:FULL LOAD Ta:25℃	3.2%
6	RIPPLE & NOISE(Max)	V1: 180 mVp-p	I/P:230VAC O/P:FULL LOAD Ta:25℃	V1: 45mVp-p

high frequency :

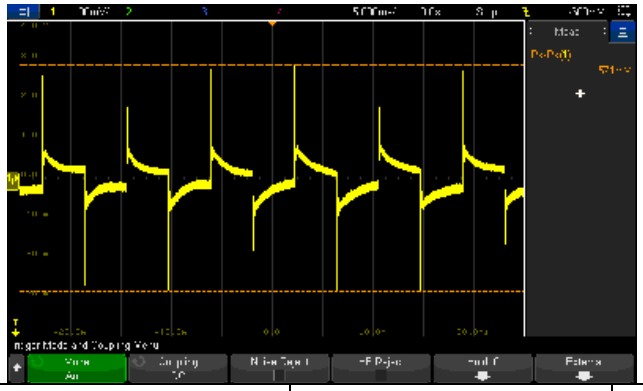
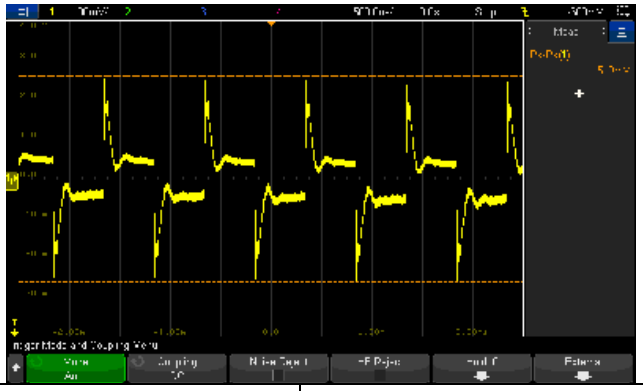


low frequency :



<table>
<tr><td rowspan="2">7</td><td>SET UP TIME(Max)</td><td>230VAC/1800ms</td><td>I/P： 230 VAC
O/P：FULL LOAD
Ta：25℃</td><td>230VAC/ 103.4 ms</td></tr>
<tr><td colspan="4">INPUT=230VAC/50HZ @ FULL LOAD
CH1 : Output Voltage CH2 : AC Input Voltage
  </td></tr>
<tr><td rowspan="2">8</td><td>RISE TIME (Max)</td><td>230VAC/60ms</td><td>I/P： 230 VAC
O/P：FULL LOAD
Ta：25℃</td><td>230VAC/ 9.06 ms</td></tr>
<tr><td colspan="4">INPUT=230VAC/50HZ @ FULL LOAD
CH1 : Output Voltage
  </td></tr>
<tr><td rowspan="2">9</td><td>HOLD UP TIME (Typ.)</td><td>230VAC/FULL LOAD /10ms
230VAC/75% LOAD /16ms</td><td>I/P： 230 VAC
O/P：FULL LOAD
Ta：25℃</td><td>230VAC/FULL LOAD / 16.2ms
230VAC/75% LOAD / 26.0ms</td></tr>
<tr><td colspan="4">INPUT=230VAC/50HZ @ FULL LOAD
CH1 : Output Voltage CH2 : AC Input Voltage
 
INPUT=230VAC/50HZ @ 75% LOAD
CH1 : Output Voltage CH2 : AC Input Voltage
  </td></tr>
<tr><td>10</td><td>DYNAMIC LOAD</td><td>V1: 1680 mVp-p</td><td>I/P: 230VAC
O/P:
(1)FULL /50% LOAD 50%DUTY / 120HZ</td><td>

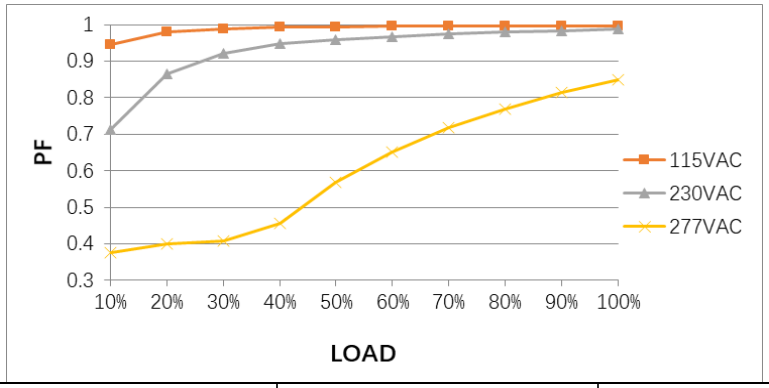
571mVp-p
519mVp-p</td></tr>
</table>

			(2)FULL /50% LOAD 50%DUTY / 1KHZ Ta:25℃	
	FULL /50% LOAD 50%DUTY / 120HZ  FULL /50% LOAD 50%DUTY / 1KHZ 			
11	TRANSIENT RECOVERY TIME	V1: 1680 mVp-p	I/P: 230VAC O/P:40% LOAD CHANGE 50%DUTY/120HZ 1.25A/us	470 mVp-p

INPUT FUNCTION TEST

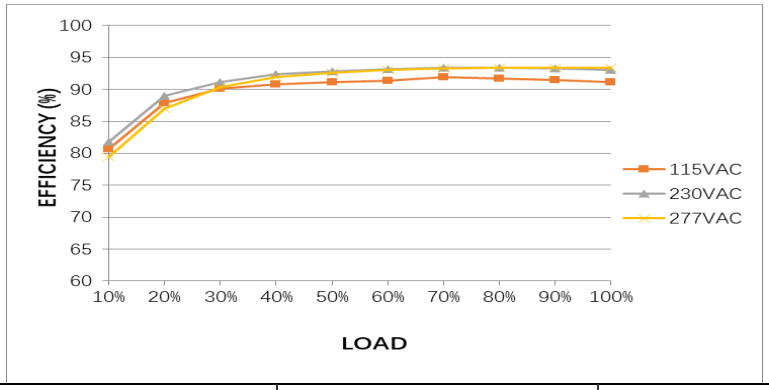
NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	INPUT VOLTAGE RANGE	90VAC~264VAC 127VDC~ 370VDC	(1) I/P:TESTING O/P:FULL LOAD (2) I/P:DC TESTING(L:+ N:-) O/P: FULL / 50% LOAD (3) I/P:DC TESTING(L:- N:+) O/P: FULL / 50% LOAD Ta:25℃	(1) 85.3 V~264V (2) 120Vdc~370Vdc/FULL LOAD 110Vdc~370Vdc/50% LOAD (3) 120Vdc~370Vdc/FULL LOAD 110Vdc~370Vdc/50% LOAD
			I/P: LOW-LINE-3V=87 V HIGH-LINE+15%=300 V O/P:FULL/MIN LOAD (PLEASE CHECK DERATING CURVE) ON: 30 Sec OFF: 30 Sec 10MIN (POWER ON/OFF NO DAMAGE)	TEST:OK
2	INPUT FREQUENCY RANGE	47HZ ~63 HZ NO DAMAGE	I/P:90 VAC ~264 VAC O/P:FULL~MIN LOAD Ta:25℃	TEST: OK
3	INPUT CURRENT (Typ.)	230V/ 4 A 115V/ 8.7A	I/P： 230 VAC I/P： 115 VAC O/P：FULL LOAD Ta：25℃	I =3.40A/ 230VAC I =7.04A/ 115VAC
6	POWER FACTOR (Typ.)	0.95/ 230VAC 0.98/115VAC	I/P： 230 VAC I/P： 115 VAC O/P：FULL LOAD Ta：25℃	PF=0.992/230VAC PF=0.997/115VAC

P.F vs LOAD



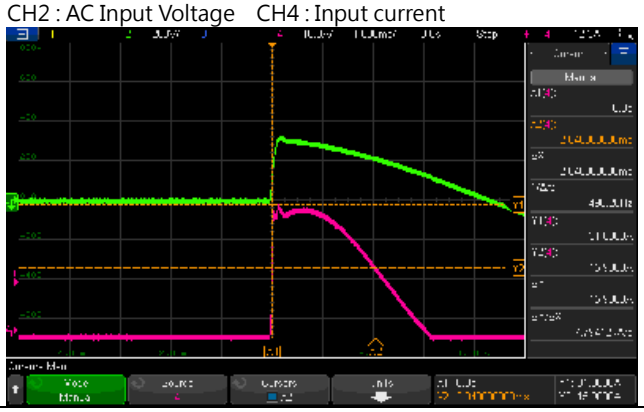
7	EFFICIENCY(Typ.)	92%	I/P:230 VAC O/P:FULL LOAD Ta:25℃	92.5%

EFFICIENCY vs LOAD



8	INRUSH CURRENT(Typ.)	230V/50A COLD START	I/P： 230 VAC O/P：FULL LOAD Ta：25℃	I =31.8A/ 230VAC T50=2.04ms/230V

INPUT=230VAC/50HZ @ FULL LOAD
CH2 : AC Input Voltage CH4 : Input current



PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OVER LOAD PROTECTION	105 %~ 115 % PROTECTION TYPE : Constant current limiting, unit will shut down after 5 sec, re-power on to recover	I/P: 264VAC I/P: 230VAC I/P: 100VAC O/P:TESTING Ta:25℃	107.3%/ 264VAC 107.3%/ 230VAC 107.3%/100VAC PROTECTION TYPE : Constant current limiting, unit will shut down after 5 sec, re-power on to recover
2	OVER VOLTAGE PROTECTION	21.5V~26V PROTECTION TYPE : Shut down and latch off o/p voltage, re-power on to recover	I/P: 264VAC I/P: 230VAC I/P: 90VAC O/P:MIN LOAD Ta:25℃	24.3V/ 264VAC 24.3V/ 230VAC 24.3V/ 90VAC PROTECTION TYPE : Shut down and latch off o/p voltage, re-power on to recover
3	OVER TEMPERATURE PROTECTION	Protection type : Shut down O/P voltage, recovers automatically after temperature goes down	I/P: 264VAC I/P: 90VAC O/P:FULL LOAD	O.T.P. Active PROTECTION TYPE : Shut down O/P voltage, recovers automatically after temperature goes down
4	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE Constant current Range： 38.7A~47.3A PROTECTION TYPE : Constant current limiting, charger will shut down after 5 sec, re-power on to recover	I/P: 264 VAC O/P: :FULL LOAD Ta:25℃	NO DAMAGE Constant current Range： 46.1 A PROTECTION TYPE : Constant current limiting, charger will shut down after 5 sec, re-power on to recover

COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	
1	PWM Transistor (D to S) or (C to E) Peak Voltage	Q 5/Q6 Rated : 31A/ 600 V	AC ON/OFF I/P: High-Line +3V =267V VDS: O/P: (1) Full Load (2) Output Short (3) Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4) Dynamic Load Full Load/ Min. Load 90%Duty/3KHz (5) Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6) Dynamic Load 100% Load/	Q5 VDS: (1) 483V (2) 491V (3) 487V (4) 487V (5) 483V (6) 483V (7) 491V	Q6 VDS: (1) 491V (2) 508V (3) 499V (4) 499V (5) 495V (6) 495V (7) 499V

			Min. Load 50%Duty/120Hz (7)0%→400% Load. Ta:25℃	
2	P.F.C Transistor (D to S) or (C to E) Peak Voltage	Q1/Q2Rated : 31A/ 600 V	I/P: High-Line +3V =267 V AC ON/OFF O/P: (1)Full Load (2)Output Short (3) Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4) Dynamic Load Full Load/ Min. Load 90%Duty/3KHz (5) Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6) Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. Ta:25℃	VDS: (1) 447V (2) 455V (3) 447V (4) 443V (5) 447V (6) 447V (7) 455V
3	AUX MOS	U600 Rate: 725V	I/P: High-Line +3V =267 V AC ON/OFF O/P: (1)Full Load (2)Output Short (3) Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4) Dynamic Load Full Load/ Min. Load 90%Duty/3KHz (5) Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6) Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. Ta:25℃	VDS: (1) 625V (2) 621V (3) 625V (4) 625V (5) 625V (6) 625V (7) 601V
4	P.F.C DIODE	D 19 Rated : 6 A/ 650 V	I/P:High-Line +3V =267 V AC ON/OFF O/P: (1)Full Load (2)Output Short (3)Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (4)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz Ta:25℃	(1) 438V (2) 452V (3) 436V (4) 444V
5	Diode Peak Voltage	Q210 Rated : 120A/80V Q214 Rated : 120A/80V	AC ON/OFF I/P:High-Line +3V =267 V Vo=Vmax O/P: (1)Full Load (2)Output Short (3)Dynamic Load Full Load/ Min. Load 90%Duty/1KHz (4)Dynamic Load Full Load/ Min. Load 90%Duty/3KHz	Q210 Vo=Vmax VDS: (1) 52.1V (2) 51.7V (3) 51.7V (4) 52.1V (5) 52.5V (6) 51.3V Q214 Vo=Vmax VDS: (1) 51.3V (2) 50.9V (3) 51.7V (4) 51.7V (5) 51.7V (6) 51..3V

			(5)Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (6)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. (8)NO LOAD Vo=Normal O/P: (1)Full Load (2)Before Burst Mode Ta:25℃	(7) 51.3V (8) 49.3V Vo=Normal (1) 50.7V (2) 46.4V	(7) 51.3V (8) 50.1V Vo=Normal (1) 50.3V (2) 46.4V
6	Input Capacitor Voltage	C5 Rated: 220u / 450 V	I/P:High-Line +3V =267V O/P: (1)Full Load input on/off (2) Min load input on /Off (3)Full Load /Min load Change (4)Full load continue Ta:25℃	(1)445V (2)441V (3)443V (4)437V	
7	Control IC Voltage Test	PWM IC U3Rated 8.9V~15.5V PFC IC U2Rated 11V~26V O/P IC U801 Rated 4.5V~36V U100 Rated 6.5V~35V	AC ON/OFF I/P:High-Line +3V =267 V O/P(1)FULL LOAD (2) Output Short (3)O.L.P (4)O.V.P. (5)NO LOAD VRmin(LOW LINE) Ta:25℃	U3 (1) 13.4V (2) 13.2V (3) 13.2V (4) 13.6V (5) 13.6V U2 (1) 14.4V (2) 14.2V (3) 14.0V (4) 13.6V (5) 14.0V	U801 (1) 10.0V (2) 10.0V (3) 10.0V (4) 10.0V (5) 10.0V U100 (1) 12.4V (2) 12.8V (3) 12.4V (4) 12.4V (5) 12.4V

■ SAFETY& E.M.C. TEST

SAFETY TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC/min I/P-FG :2KVAC/min O/P-FG:0.5KVAC/min	I/P-O/P: 3.6 KVAC/min I/P-FG: 2.4 KVAC/min O/P-FG:0.6 KVAC/min Ta:25℃	I/P-O/P:3.14mA I/P-FG:3.62mA O/P-FG:2.79m A NO DAMAGE
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℃	I/P-O/P: 9999MΩ I/P-FG: 9999MΩ O/P-FG: 9999MΩ NO DAMAGE
3	GROUNDING CONTINUITY	FG(PE) TO CHASSIS OR TRACE < 100 mΩ	40A / 2min Ta:25℃	19 mΩ

E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	HARMONIC	BS EN/EN61000-3-2 CLASS A	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25℃	PASS
2	CONDUCTION	BS EN/EN 55032 (CISPR32), BS EN / EN55014-1 CLASS B	I/P: 230 VAC (50HZ) O/P:FULL/50% LOAD Ta:25℃	PASS Test by certified Lab
3	RADIATION	BS EN/EN 55032 (CISPR32), BS EN / EN55014-1 CLASS B	I/P:230VAC/50HZ O/P:FULL /50% LOAD Ta:25℃	PASS Test by certified Lab
4	E.S.D	BS EN/EN61000-4-2 AIR：8KV / Contact：4KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A
5	E.F.T	BS EN/EN61000-4-4 INPUT: 1KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A
6	SURGE	BS EN/EN 61000-4-5 L-N :1KV L,N-PE:2KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A
7	Test by certified Lab & Test Report Prepare Any contradictions of the test results, please refer to the latest EMC test report			

■ RELIABILITY TEST

ENVIRONMENT TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	TEMPERATURE RISE TEST	MODEL：NPP-750-12 1. ROOM AMBIENT BURN-IN：2 HRS I/P： 230VAC O/P： FULL LOAD Ta= 29.5 ℃ 2. HIGH AMBIENT BURN-IN： 2 HRS I/P： 230VAC O/P： FULL LOAD Ta= 49.0 ℃		

NO	Position	ROOM AMBIENT Ta= 29.5 ℃	HIGH AMBIENT Ta=49.0℃
1	ZNR1	33.5℃	53.1℃
2	LF1	36.1℃	55.9℃
3	C2	40.9℃	60.9℃
4	LF3	40.1℃	59.8℃
5	BD1	51.3℃	70.2℃
6	R24	27.2℃	64.9℃
7	RY1	40.5℃	60.0℃
8	RTH1	40.6℃	60.2℃
9	RTH5	40.8℃	60.8℃
10	TSW1	37.0℃	56.6℃
11	L1	39.0℃	58.2℃
12	Q2	42.4℃	62.2℃
13	C5	40.0℃	59.3℃
14	C41	38.0℃	57.7℃
15	T1	57.2℃	76.7℃
16	Q211	47.2℃	67.1℃
17	Q214	50.8℃	71.0℃
18	T600	44.6℃	64.3℃
19	U150	38.3℃	57.8℃
20	C114	38.4℃	57.6℃
21	U3	40.7℃	60.4℃
22	L3	54.1℃	74.0℃
23	C115	40.9℃	60.8℃
24	C106	32.1℃	51.5℃
25	LF100	53.3℃	73.8℃
26	Q6	50.3℃	71.5℃
27	U600	52.3℃	72.1℃
28	U2	46.4℃	66.0℃
29	U100	60.8℃	81.3℃
30	D9	45.3℃	64.7℃
31	R228	53.4℃	73.9℃
32	D19	54.1℃	73.2℃
33	D651	42.7℃	62.3℃
34	PCB	47.4℃	66.7℃
35	U804	35.5℃	55.3℃
36	Q810	32.9℃	52.3℃
37	C8	39.6℃	59.2℃

2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR	I/P： 230VAC/100VAC O/P： 100 %LOAD Ta= -35℃	TEST：OK
3	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 12 HOURS IN CHAMBER ON CONTROL 50 ℃ NO DAMAGE	I/P： 272 VAC O/P：FULL LOAD Ta= 50.1 ℃ HUMIDITY= 95 %R.H	TEST：OK
4	TEMPERATURE COEFFICIENT	± 0.05%/ (0℃~50℃)	I/P： 230 VAC O/P：FULL LOAD	0.0061 %/℃(0~50℃)

5	STORAGE TEMPERATURE TEST	-40~85℃	1. Thermal shock Temperature： -45℃~ +90℃ 2. Temperature change rate ：25℃ / MIN 3. Dwell time low and high temperature ： 30 MIN/EACH 4. Total test cycle：10CYCLE 5. Input/Output condition： STATIC
6	THERMAL SHOCK TEST	-30~50℃	1. Thermal shock Temperature： -35℃~ +55℃ 2. Temperature change rate ：25℃ / MIN 3. Dwell time low and high temperature ： 30 MIN/EACH 4. Total test cycle：16 CYCLE 5. Input/Output condition： 15cycle:230V/ FULL LOAD AC ON 3sec/AC OFF 1sec TEST 1cycle:230V/ FULL LOAD Burn In Test
7	VIBRATION TEST	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes	1 Carton & 1 Set (1) Waveform： Sine Wave (2) Frequency：10~500Hz (3) Sweep Time：10min/sweep cycle (4) Acceleration：3G (5) Test Time：180min in each axis (X.Y.Z) (6) Ta：25℃
8	CAPACITOR LIFE CYCLE	SUPPOSE C115 IS THE MOST CRITICAL COMPONENT (1) I/P： 230VAC O/P：FULL LOAD Ta= 25 ℃ LIFE TIME (2) I/P： 230VAC O/P：FULL LOAD Ta= 50 ℃ LIFE TIME (3) I/P： 230VAC O/P：75% LOAD Ta= 50 ℃ LIFE TIME (4) I/P： 230VAC O/P：50% LOAD Ta= 50 ℃ LIFE TIME	 (1) 1683605.1HRS (2) 289483.7HRS (3) 459302HRS (4) 628280.5HRS
9	MTBF	Conducted by Parts Stress Analysis Prediction 294.5K hrs min. Telcordia SR-332 (Bellcore) ; 95.7K hrs min. MIL-HDBK-217F (25℃)	
10	Ongoing Reliability Test	I/P：230VAC O/P：FULL LOAD TA=50℃ Demonstration Mean Time Between Failure : 30,000 hours	

TEST RESULT	TESTER	REVIEW	APPROVAL
PASS	LIUTT		Wangdz

2020.10.1 TAG-QA-009