Test Report: NPP-1200-24

1200W 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 **(default)**	28.8V± 0.48 V	I/P: 230 VAC O/P: CC=90% LOAD Ta:25℃	28.849V
2	FLOAT CHARGE VOLTAGE (default)	27.6V± 0.48 V	I/P: 230 VAC O/P:NO LOAD Ta:25℃	27.692V
3	OUTPUT VOLTAGE ADJUST RANGE	CH1: 21 V~ 42 V	I/P： 230 VAC O/P：CC=90% LOAD Ta：25℃	19.908V~42.902V
4	CURRENT ADJUSTABLE RANGE	18~36A	I/P： 230 VAC O/P：C.V MODE-2V Ta：25℃	17.068A~37.328A
5	MAX POWER	1209.6W	I/P: 230 VAC O/P:BAT. LOAD(CV=33.6V) Ta:25℃	1210.8W
6	MAX. OUTPUT CURRENT	36A±0.36A	I/P： 230 VAC O/P：C.V MODE-2V Ta：25℃	36.038A

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE Constant current Range： 34.2~37.8A PROTECTION TYPE： Constant current limiting, charger will shutdown after 5 sec, re-power on to recover	I/P: 264 VAC O/P: BAT. LOAD Ta:25℃	NO DAMAGE Constant current Range： 35.992 A PROTECTION TYPE： Constant current limiting, charger will shutdown after 5 sec, re-power on to recover
2	OVER VOLTAGE PROTECTION	43V~52V 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℃	48.0V/ 264VAC 48.4V/ 230VAC 48.4V/ 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 OK PROTECTION TYPE : Shut down O/P voltage, recovers automatically after temperature goes down

CONTROL FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	FAN SPEED 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 stop charging ; SHORT(10.8V~13.2V) : Charger normal work	I/P: 230 VAC O/P:BAT. LOAD Ta:25℃	OPEN /SHORT TEST: OK Charger stop charging: -0.5V~3.6V Charger normal work: 3.7V~13.2V (1) Remote off P= 4.366 W (2) Remote off Vo=0.0098V
3	CHARGE OK SIGNAL	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 = 5.178 V; Charger failure=0.0122 V Charger protection=0.0122V
4	BATTERY FULL SIGNAL	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 = 5.186 V Charging = 0.0131 mV
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: 11.632 V 54 mVp-p
6	CHARGING CURVE	I/P:230Vac O/P:TESTING Ta:25℃		

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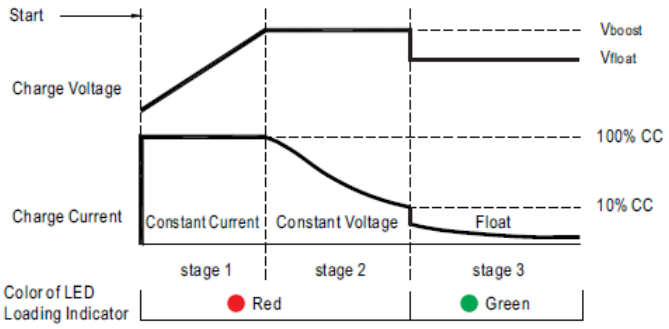
◎ 3 stage charging curve (Default)


<table>
<tr><td>Taper Current</td><td>3.6A±0.36A</td></tr>
<tr><td>Io</td><td>3.398A</td></tr>
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<tr>
<td>7</td>
<td>LED INDICATOR</td>
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<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 stage 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℃
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<td>TEST : OK</td>
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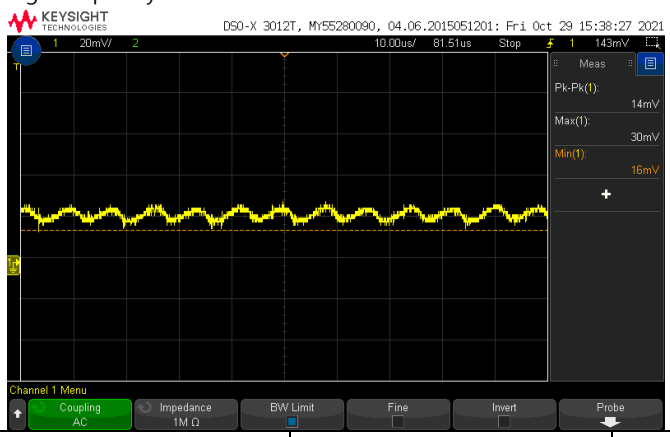
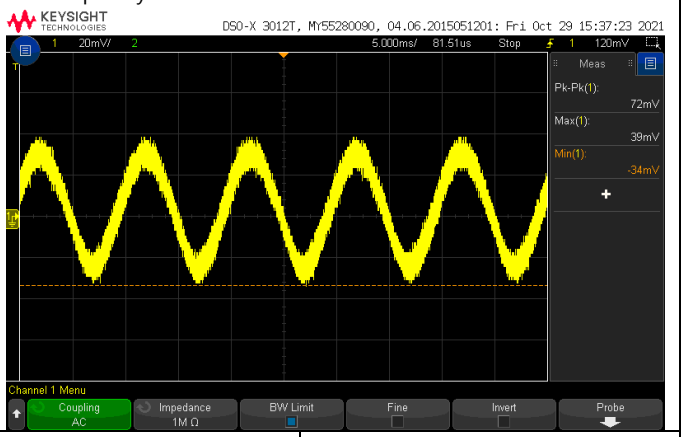
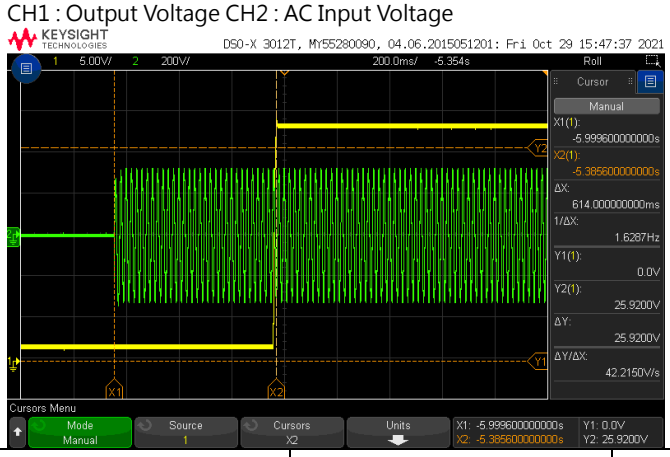
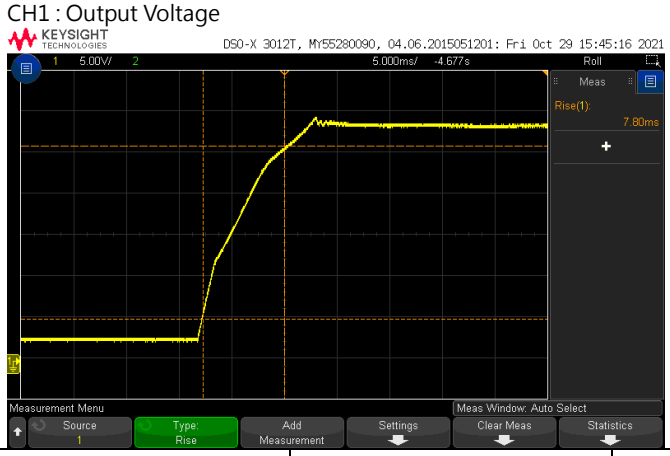
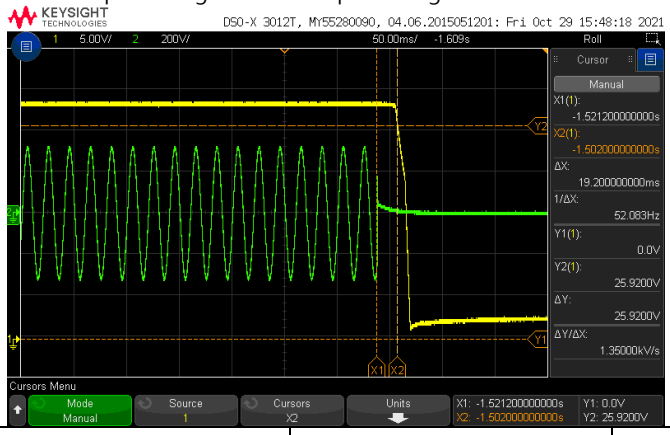
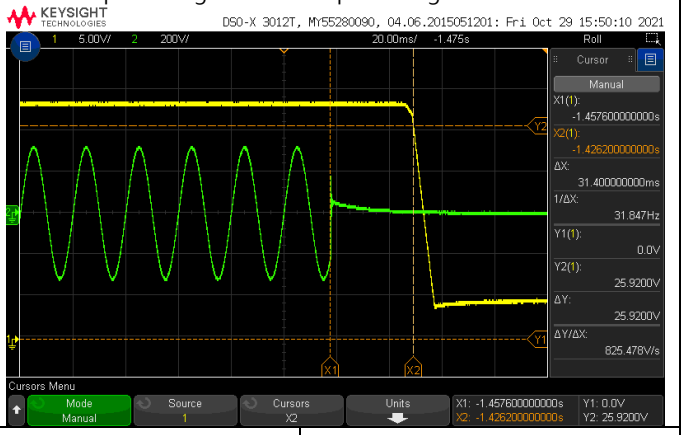
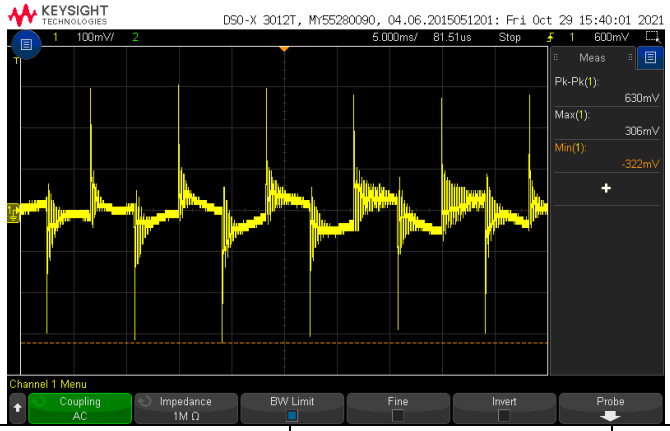
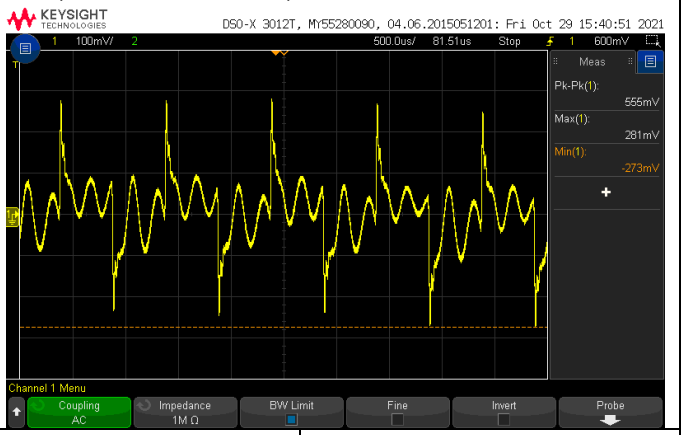
Power Supply mode

■ DESIGN VERIFY TEST

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OUTPUT VOLTAGE ADJUST RANGE	CH1: 21 V~ 42 V	I/P： 230 VAC I/P： 115 VAC O/P：MIN LOAD Ta：25℃	19.99V~42.948V/230VAC 19.99V~42.945V//115VAC
2	CURRENT ADJUSTABLE RANGE	18A~ 36A	I/P: 90VAC~ 264VAC O/P:TEST LOAD Ta:25℃	17.268A~36.828A
3	OUTPUT VOLTAGE(Max) TOLERANCE	V1: -1.0 %~ +1.0 %	I/P: 90VAC /264VAC O/P:FULL/ MIN. LOAD Ta:25℃	V1: -0.0832%~0.0694%
4	LINE REGULATION (Max)	V1: -0.5 %~ +0.5 %	I/P: 90VAC~ 264VAC O/P:FULL LOAD Ta:25℃	V1: -0.0069%~0.0347%
5	LOAD REGULATION(Max)	V1: -1.0 %~ +1.0 %	I/P: 230VAC O/P:FULL ~MIN LOAD Ta:25℃	V1: -0.0832%~0.0694%
6	OVER/UNDERSHOOT TEST	< ±5%	I/P: 230VAC O/P:FULL LOAD Ta:25℃	3.87%
7	RIPPLE & NOISE(Max)	V1: 300 mVp-p	I/P:230VAC O/P:FULL LOAD Ta:25℃	V1: 72mVp-p 5ms 14mVp-p 10us
	high frequency : 		low frequency : 	
8	SET UP TIME(Max)	230VAC/1800ms	I/P： 230 VAC O/P：FULL LOAD Ta：25℃	230VAC/614ms

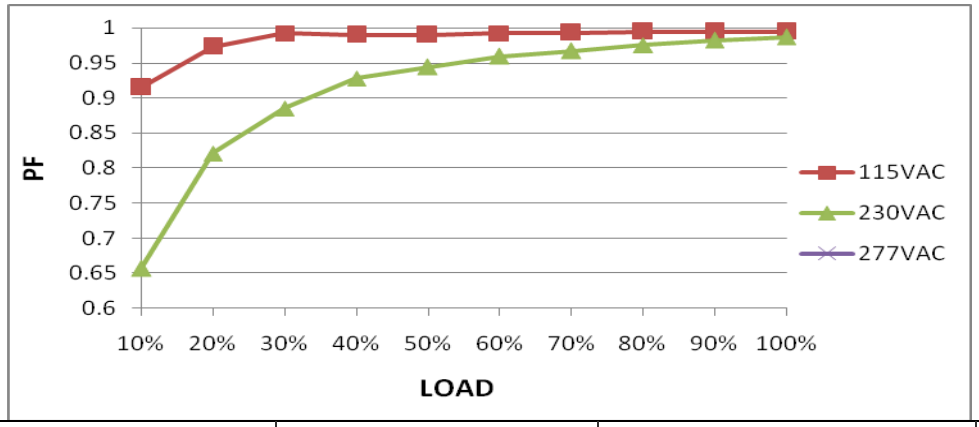
	INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage 			
9	RISE TIME (Max)	230VAC/60ms	I/P： 230 VAC O/P：FULL LOAD Ta：25℃	230VAC/7.80 ms
	INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage 			
10	HOLD UP TIME (Typ.)	230VAC/FULL LOAD /10ms 230VAC/75% LOAD /16ms	I/P： 230 VAC O/P：FULL LOAD Ta：25℃	230VAC/FULL LOAD /19.2ms 230VAC/75% LOAD /31.40ms
	INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage  INPUT=230VAC/50HZ @ 75% LOAD CH1 : Output Voltage CH2 : AC Input Voltage 			
11	DYNAMIC LOAD	V1: 2880 mVp-p	I/P: 230VAC O/P: (1)FULL /50% LOAD 50%DUTY / 120HZ	630mVp-p/ 120HZ 555mVp-p/ 1KHZ

			(2)FULL /50% LOAD 50%DUTY / 1KHZ Ta:25℃	
	FULL /50% LOAD 50%DUTY / 120HZ  		FULL /50% LOAD 50%DUTY / 1KHZ  	
12	TRANSIENT RECOVERY TIME	V1: 2880 mVp-p	I/P: 230VAC O/P:40% LOAD CHANGE 50%DUTY/120HZ 2.5A/us	511mVp-p

INPUT FUNCTION TEST

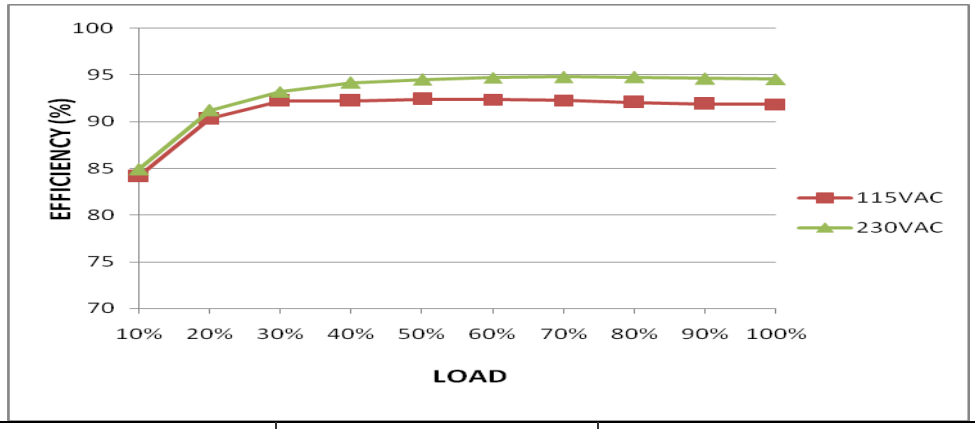
NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	INPUT VOLTAGE RANGE	90VAC~264VAC 127VDC~ 370VDC	(1) I/P:TESTING O/P: FULL LOAD (2) I/P:DC TESTING(L:+ N:-) O/P: FULL / 50% LOAD (3) I/P:DC TESTING(L:- N:+) O/P: FULL/ 50% LOAD Ta:25℃	(1)84.6V/80%load~264V 137.4V/100%load~264V (2)121.38 Vdc~370Vdc/FULL LOAD 119.48Vdc~370Vdc/50% LOAD (3) 121.58Vdc~370Vdc/FULL LOAD 119.48Vdc~370Vdc/50% LOAD
			I/P: LOW-LINE-3V=87 V HIGH-LINE+15%=300 V O/P: FULL LOAD /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/ 6.5 A 115V/ 12 A	I/P： 230 VAC I/P： 115 VAC O/P：FULL LOAD Ta：25℃	I =5.625A/ 230VAC I =9.42A/ 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=0.990/230VAC PF=0.996/115VAC

P.F vs LOAD



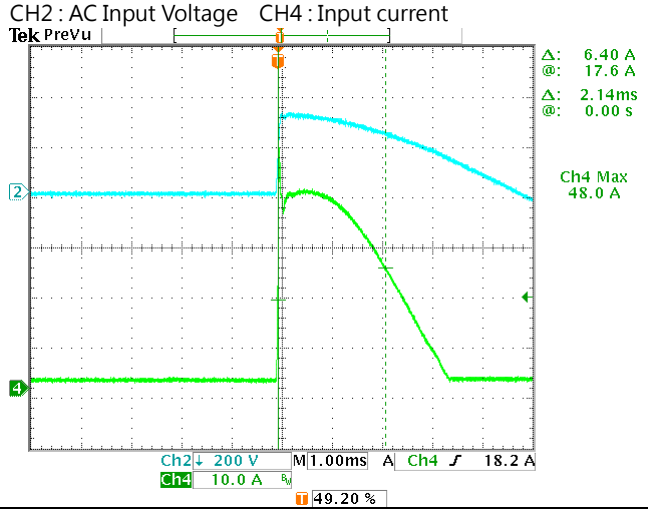
7	EFFICIENCY(Typ.)	93%	I/P:230 VAC O/P: FULL LOAD Ta:25℃	94.406%

EFFICIENCY vs LOAD



8	INRUSH CURRENT(Typ.)	230V/50A COLD START	I/P： 230 VAC O/P：FULL LOAD Ta：25℃	I =48.0A/ 230VAC T50=2.14ms/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: 180VAC O/P:TESTING Ta:25℃	110.55%/ 264VAC 110.55%/ 230VAC 110.58%/180VAC PROTECTION TYPE : Constant current limiting, unit will shut down after 5 sec, re-power on to recover
2	OVER VOLTAGE PROTECTION	43V~52V 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℃	48.0V/ 264VAC 48.4V/ 230VAC 48.4V/ 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 OK 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: 37.8~41.4A 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: 39.743 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 901/Q903 Rated : 600V/ 40A	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/	Q901 VDS: (1) 456V (2) 501V (3) 444V (4) 448V (5) 456V (6) 468V (7) 477V	Q903 VDS: (1) 460V (2) 505V (3) 452V (4) 452V (5) 452V (6) 458V (7) 485V

			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 Rate: 600V /34 A	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℃	Q1 VDS: (1) 501V (2) 477V (3) 473V (4) 477V (5) 477V (6) 468V (7) 464V
3	AUX MOS	U600 Rated : 800V /4.9 A	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℃	U600 VDS: (1) 589V (2) 605V (3) 581V (4) 589V (5) 589V (6) 589V (7) 593V
4	P.F.C DIODE	D 8 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) 508V (2) 512V (3) 496V (4) 492V
5	Diode Peak Voltage	Q210 / Q214/ Q218/ Q222 Rated: 120V/ 98A	AC ON/OFF I/P:High-Line +3V =267 V 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/	Q210 VO=VMAX VDS: (1) 96.0V (2) 104.1V (3) 96.0V (4) 95.2V (5) 96.0V (6) 97.6V Q218 VO=VMAX VDS: (1) 97.6V (2) 97.6V (3) 96.8V (4) 98.4V (5) 97.6V (6) 98.4V

			Min. Load 90%Duty/5KHz (6)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. (8)NO LOAD Ta:25℃	(7) 95.2V (8) 94.4V Q214 VO=VMAX VDS: (1) 97.6V (2) 97.6V (3) 97.6V (4) 96.8V (5) 97.6V (6) 100.1V (7) 96.8V (8) 96.0V	(7) 96.0V (8) 95.2V Q222 VO=VMAX VDS: (1) 97.6V (2) 97.6V (3) 97.6V (4) 96.8V (5) 96.8V (6) 97.6V (7) 96.8V (8) 96.8V
6	Input Capacitor Voltage	C 5 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)442V (2)448V (3)446V (4)444V	
7	Control IC Voltage Test	PWM IC U800Rated 8.9V~15.5V PFC IC U1Rated 11V~26V U250 Rated -0.3V~37V O/P IC U801 Rated 4.5V~36V U250 Rated -0.3V~37V	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℃	U800 (1) 12.82V (2) 13.30V (3) 13.30V (4) 12.66V (5) 13.38V U1 (1) 13.06V (2) 13.63V (3) 13.55V (4) 12.98V (5) 13.30V	U250 (1) 13.06V (2) 14.11V (3) 13.06V (4) 12.98V (5) 13.06V U801 (1) 12.42V (2) 12.42V (3) 12.10V (4) 12.10V (5) 12.42V

■ 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	I/P-O/P:3.77mA I/P-FG:3.32mA O/P-FG:3.30m A

			Ta:25℃	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℃	32mΩ

E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	HARMONIC	BS EN61000-3-2 CLASS A	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25℃	PASS
2	CONDUCTION	BS EN/EN55032(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/EN55032(CISPR32), BS EN/EN55014-1 CLASS A	I/P:230VAC/50HZ O/P:FULL /50% LOAD Ta:25℃	PASS Test by certified Lab
4	E.S.D	BS EN61000-4-2 AIR：8KV / Contact：4KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A
5	E.F.T	BS EN61000-4-4 INPUT: 1KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A
6	SURGE	BS IEC61000-4-5 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-1200-24 1. ROOM AMBIENT BURN-IN：2 HRS I/P： 230VAC O/P： FULL LOAD Ta= 28.2 ℃ 2. HIGH AMBIENT BURN-IN： 2 HRS I/P： 230VAC O/P： FULL LOAD Ta= 50.0 ℃		

NO	Position	ROOM AMBIENT Ta= 28.2 ℃	HIGH AMBIENT Ta= 50.0 ℃
1	ZNR1	36.5℃	51.3℃
2	C10	41.7℃	65.3℃
3	C2	40.5℃	64.9℃
4	LF3	45.2℃	70.0℃
5	C11	48.6℃	70.3℃
6	BD1	60.3℃	84.5℃
7	Q2	55.1℃	78.3℃
8	Q1	56.5℃	79.7℃
9	L1	58.4℃	80.9℃
10	U1	47.6℃	70.3℃
11	RY1	46.7℃	69.9℃
12	C923	38.5℃	61.1℃
13	RTH1	43.6℃	66.6℃
14	RT80	50.0℃	73.7℃
15	U600	59.3℃	82.6℃
16	Q901	63.0℃	90.8℃
17	L3	72.4℃	96.1℃
18	LF1	43.9℃	68.7℃
19	C7	42.0℃	65.1℃
20	T2	54.4℃	77.1℃
21	C113	42.1℃	64.7℃
22	RTH5	48.0℃	70.8℃
23	T1	52.1℃	75.6℃
24	C116	35.2℃	58.3℃
25	C115	38.2℃	61.2℃
26	T601	39.1℃	62.5℃
27	U150	31.8℃	54.9℃
28	LF100	39.4℃	62.6℃
29	Q150	29.8℃	52.8℃
30	U800	36.8℃	60.3℃
31	R12	61.2℃	80.3℃
32	D8	62.1℃	84.7℃
33	Q216	48.5℃	71.4℃
34	Q219	48.2℃	70.9℃
35	U260	51.3℃	74.2℃
36	J103	48.2℃	70.7℃

2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR	I/P : 264VAC/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 ℃/95 %R.H NO DAMAGE	I/P : 272 VAC O/P : FULL LOAD Ta= 50 ℃ HUMIDITY= 95% R.H	TEST : OK
4	TEMPERATURE COEFFICIENT	± 0.05 %/℃(0~50℃)	I/P : 230 VAC O/P : FULL LOAD	±0.0057 %/℃(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：10 CYCLE 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 C113 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) 1296622.9HRS (2) 216848.4HRS (3) 315868.6HRS (4) 414012.8HRS
9	MTBF	Conducted by Parts Stress Analysis Prediction 625.1K hrs min. Telcordia SR-332 (Bellcore) ; 63.6K 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