



Test Report: NSP-100-7.5

100W AC/DC High Reliable Multi-Industries Enclosed Type 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

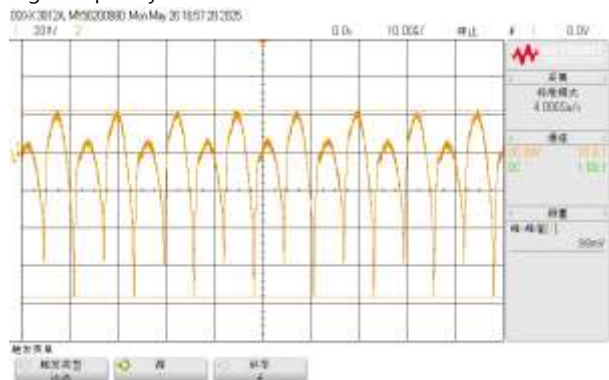
ENVIRONMENT TEST

DESIGN VERIFY TEST

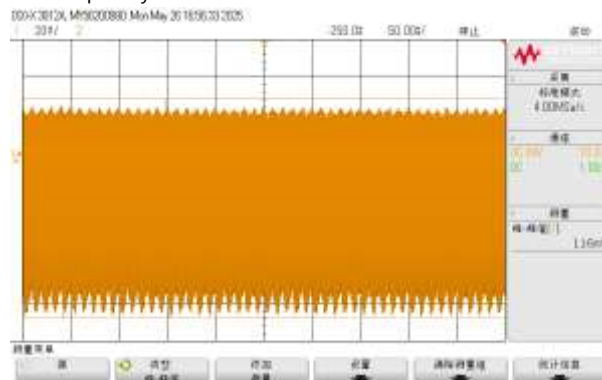
OUTPUT FUNCTION TEST

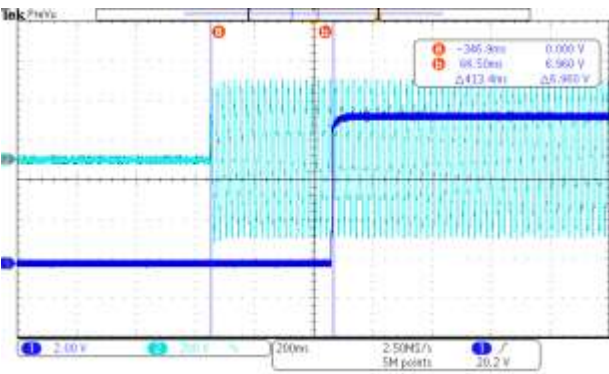
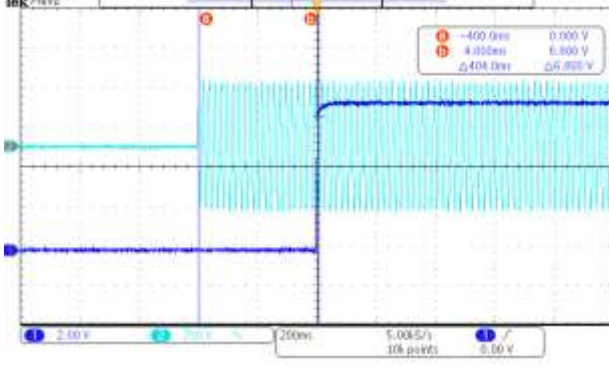
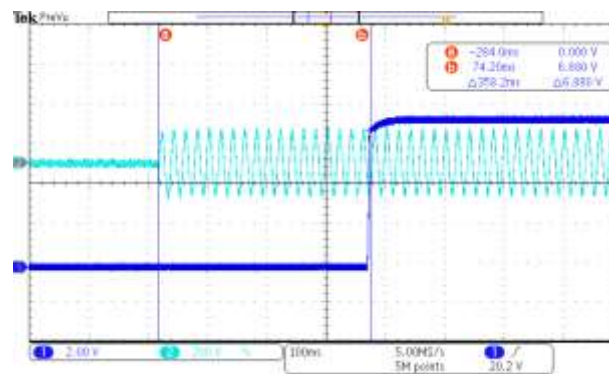
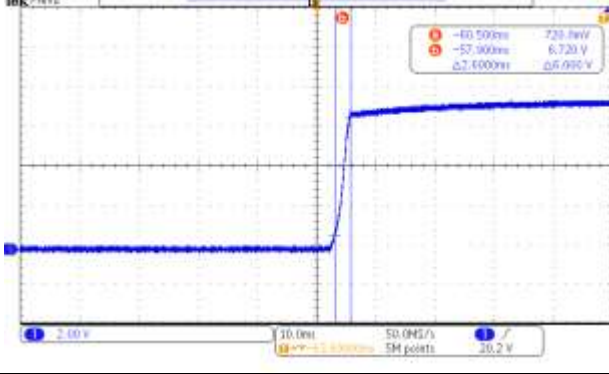
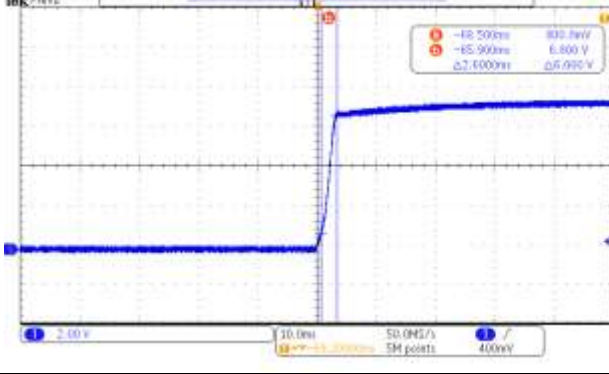
NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OUTPUT VOLTAGE ADJUST RANGE	CH1: 6.8V~9.0V	I/P : 230 VAC O/P : MIN LOAD Ta : 25°C	6.53V~9.48V/230VAC
2	OUTPUT VOLTAGE TOLERANCE	V1: -2.0 %~ 2.0%	I/P: 85VAC /305VAC O/P:FULL/ MIN. LOAD Ta:25°C	V1: -0.53 %~ 0.26%
3	LINE REGULATION	V1: -0.5%~ 0.5%	I/P: 85VAC~ 305VAC O/P:FULL LOAD Ta:25°C	V1: -0.13%~0.13%
4	LOAD REGULATION	V1: -1.0%~ 1.0%	I/P: 230VAC O/P:FULL ~MIN LOAD Ta:25°C	V1: -0.5%~ 0.4 %
5	OVER/UNDERSHOOT TEST	< ±10%	I/P: 230VAC O/P:FULL LOAD Ta:25°C	4.2%
6	RIPPLE & NOISE (Max)	V1: 150mVp-p	I/P: 230 VAC O/P: MIN LOAD—FULL LOAD Ta:25°C	V1: 116mVp-p / 100% load

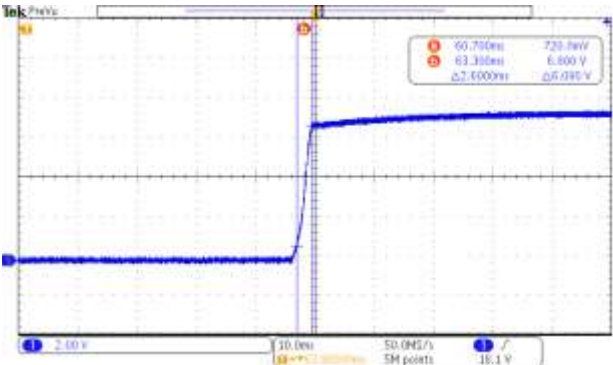
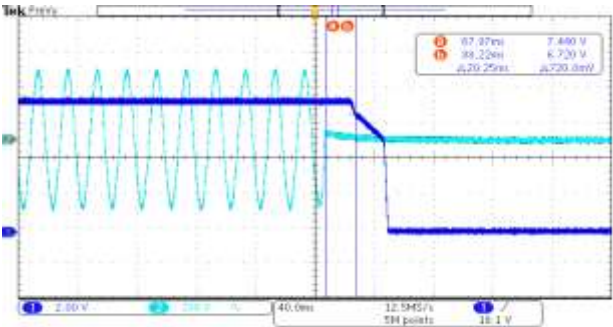
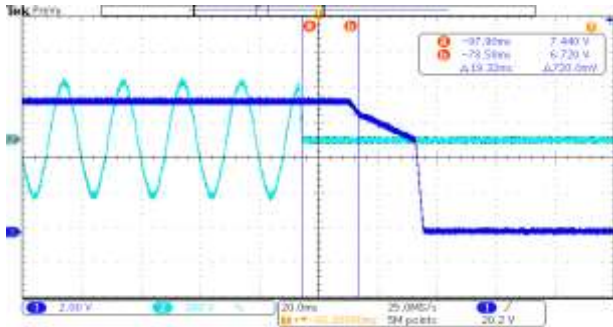
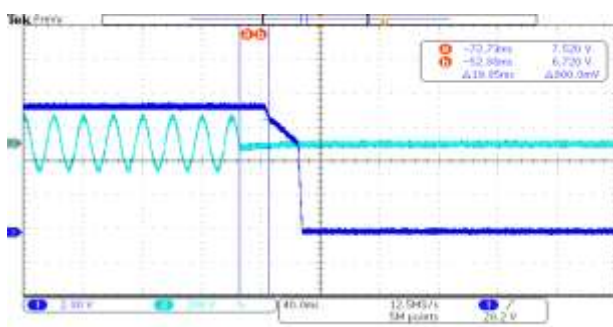
high frequency :

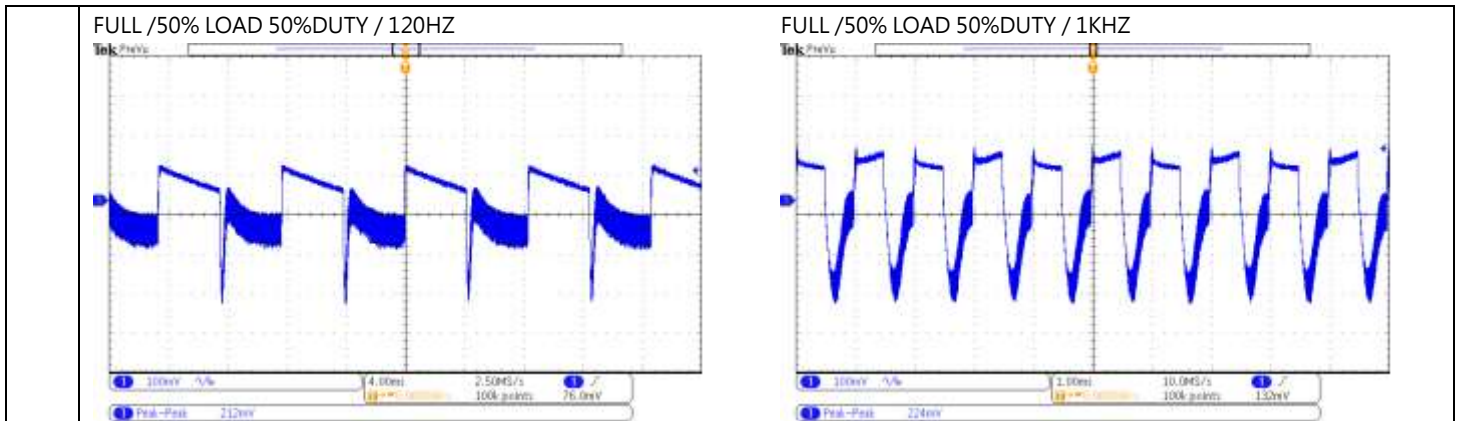


low frequency :



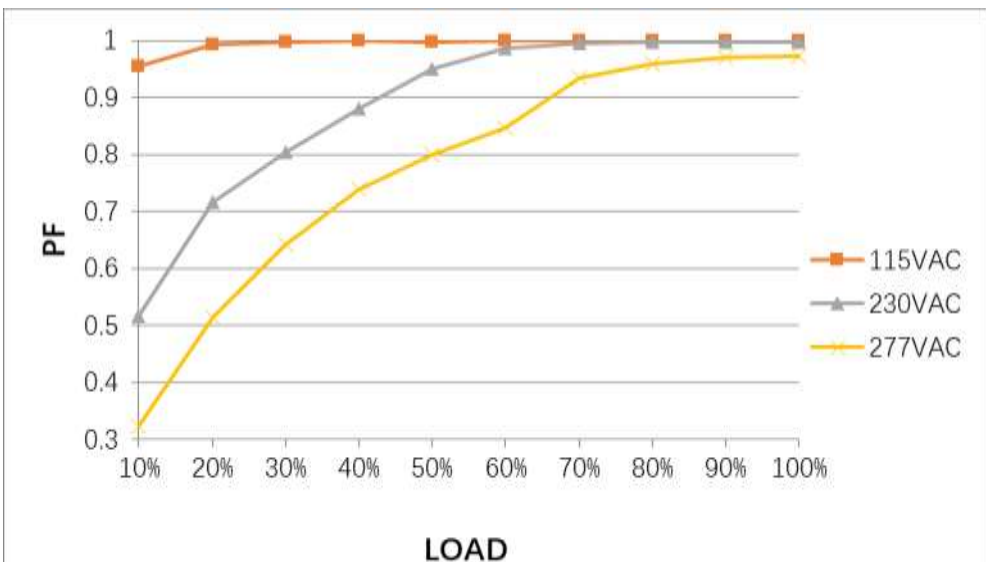
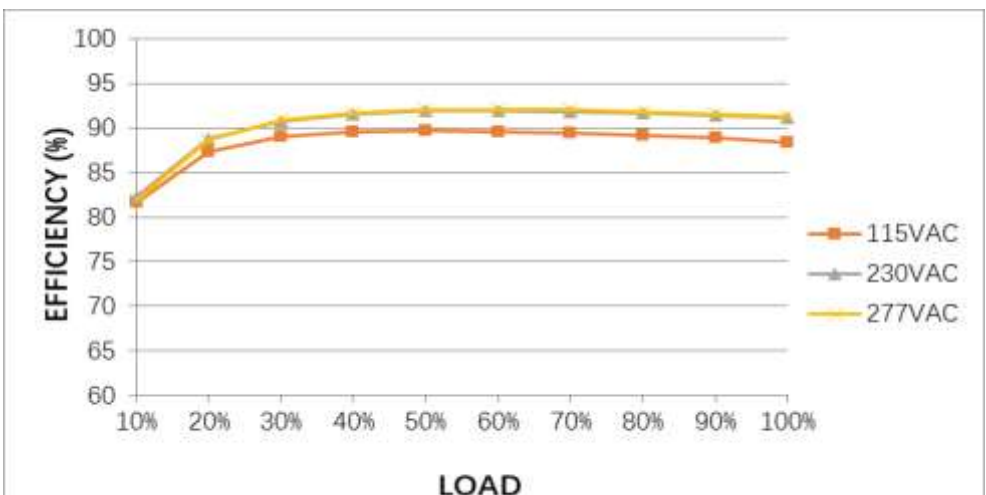
7	SET UP TIME(Max)	277VAC/1000ms 230VAC/1000ms 115VAC/1500ms	I/P : 277 VAC I/P : 230 VAC I/P : 115VAC O/P : FULL LOAD Ta : 25°C	277VAC/413.4ms 230VAC/404ms 115VAC/358.2ms
INPUT=277VAC/60HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage  INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage  INPUT=115VAC/60HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage 				
8	RISE TIME (Max)	277VAC/80ms 230VAC/80ms 115VAC/80ms	I/P : 277VAC I/P : 230 VAC I/P : 115VAC O/P : FULL LOAD Ta : 25°C	277VAC/ 2.6ms 230VAC/2.6ms 115VAC/ 2.6ms
INPUT=277VAC/60HZ @ FULL LOAD CH1 : Output Voltage  INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage 				

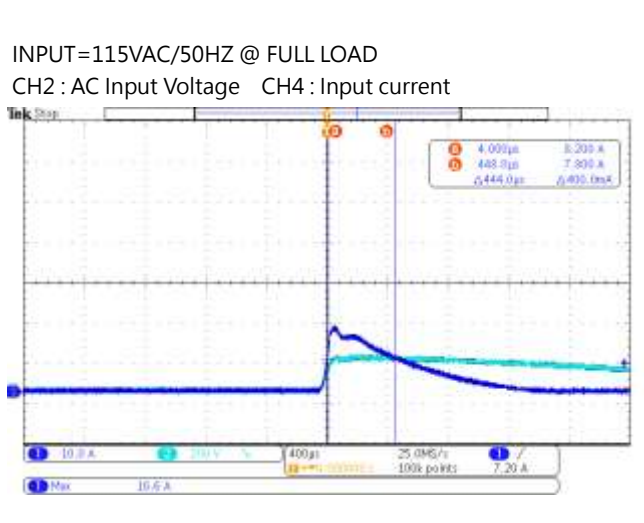
INPUT=115VAC/60HZ @ FULL LOAD CH1 : Output Voltage 				
9	HOLD UP TIME (Typ.)	277VAC/16ms 230VAC/16ms 115VAC/16ms	I/P : 277VAC I/P : 230 VAC I/P : 115VAC O/P : FULL LOAD Ta : 25°C	277VAC/20.25ms 230VAC/19.32ms 115VAC/19.85ms
INPUT=277VAC/60HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage  INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage  INPUT=115VAC/60HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage 				
10	DYNAMIC LOAD	V1: 1500mVp-p	I/P: 230VAC O/P: (1)FULL /50% LOAD 50%DUTY / 120HZ (2)FULL /50% LOAD 50%DUTY / 1KHZ Ta:25°C	212mVp-p 224mVp-p



INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	INPUT VOLTAGE RANGE	85VAC~305VAC 120VDC~ 431VDC	(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°C	(1) 82V~308V (2) 117Vdc~434Vdc/FULL LOAD 117Vdc~ 434Vdc/50% LOAD (3) 117Vdc~434 Vdc/FULL LOAD 117 Vdc~434Vdc/50% LOAD
			I/P: LOW-LINE-3V=82 V HIGH-LINE+10V=315 V O/P:FULL/MIN LOAD (PLEASE CHECK DERATING CURVE) ON: 30 Sec OFF: 30 Sec 10MIN (POWER ON/OFF NO DAMAGE)	TEST:PASS
2	INPUT FREQUENCY RANGE	47HZ ~63 HZ NO DAMAGE	I/P:85VAC ~305VAC O/P:FULL~MIN LOAD Ta:25°C	TEST: PASS
3	INPUT CURRENT (Typ.)	277V/ 0.45A 230V/ 0.52 A 115V/ 1.1 A	I/P : 277VAC I/P : 230 VAC I/P : 115VAC O/P : FULL LOAD Ta : 25°C	I =0.40A/ 277VAC I =0.47A/ 230VAC I =0.96A/ 115VAC
4	LEAKAGE CURRENT	Earth leakage current <350μA(rms)@277Vac	I/P : 277 VAC O/P : Min LOAD Ta : 25°C	L-FG : 225μA N-FG : 221μA
		Touch current <100μA(rms)@277Vac	I/P : 277 VAC O/P : Min LOAD Ta : 25°C	L-V+ : 56 μA L-V- : 56 μA N-V+ : 56 μA N-V- : 56 μA

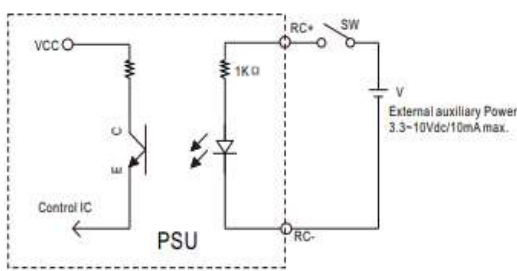
5	POWER FACTOR (Typ.)	0.90/277VAC 0.93/ 230VAC 0.98/ 115VAC	I/P : 277 VAC I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C	PF=0.971/277VAC PF=0.997/230VAC PF=0.999/115VAC
	P.F vs LOAD 			
6	EFFICIENCY(Typ.)	91%	I/P:230 VAC O/P:FULL LOAD Ta:25°C	91.1%
	EFFICIENCY vs LOAD 			
7	NO LOAD POWER CONSUMPTION(Typ.)	Remote Power ON : 2W/277VAC 2W/230VAC 2W/115VAC Remote Power OFF : 0.5W/277VAC 0.5W/230VAC 0.3W/115VAC	I/P : 277VAC I/P : 230 VAC I/P : 115 VAC O/P : RC ON/RC OFF Ta : 25°C	Remote Power ON : 0.72W/277VAC 0.78W/230VAC 0.84W/115VAC Remote Power OFF : 0.36W/277VAC 0.29W/230VAC 0.15W/115VAC

INRUSH CURRENT(Typ.)	277V/45A 230V/35A 115V/20A COLD START	I/P : 277 VAC I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C	I =33.8A/ 277VAC T50=552us/277V I =29A/ 230VAC T50=748us/230V I =16.6A/ 115VAC T50=444us/115V
INPUT=277VAC/50HZ @ FULL LOAD CH2 : AC Input Voltage CH4 : Input current		INPUT=230VAC/50HZ @ FULL LOAD CH2 : AC Input Voltage CH4 : Input current	
			
INPUT=115VAC/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%~ 150%	I/P: 305VAC I/P: 230VAC I/P: 85VAC O/P: TESTING Ta:25°C	135.23 % / 305VAC 135.23 % / 230VAC 135.23 % / 85VAC Protection type : 1 · 105%~150% rated output power, Constant current limiting for more than 5 secnds and then shut down o/p voltage, AC re-power on to recover
2	OVER VOLTAGE PROTECTION	9.2V~13V	I/P: 305VAC I/P: 230VAC I/P: 85VAC O/P: MIN LOAD Ta:25°C	11.8V/ 305VAC 11.8V/ 230VAC 11.8V/ 85VAC Protection type : Shut down o/p voltage, re-power on to recover
3	OVER TEMPERATURE PROTECTION	NO DAMAGE	I/P: 305VAC I/P: 85VAC O/P: FULL LOAD	O.T.P Active Protection type : Shut down o/p voltage, re-power on to recover
4	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P: 305VAC I/P: 85VAC O/P: FULL LOAD Ta:25°C	NO DAMAGE Protection type : Constant current limiting for more than 5 seconds and then shut down o/p voltage, AC re-power on to recover

CONTROL FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT												
1	REMOTE ON/OFF CONTROL	2.Remote Control The PSU can be turned ON/OFF by using the "Remote Control" function with external switch and auxiliary power <table><tr><td>PSU Vo Status</td><td>Between RC-(pin1) and RC+(pin2) on CN1</td></tr><tr><td>POWER ON</td><td>Keep 0~0.8Vdc or open</td></tr><tr><td>POWER OFF</td><td>Keep 3.3~10Vdc by external voltage</td></tr></table> I/P: 230 VAC O/P:FULL LOAD Ta:25°C Test Result : <table><tr><td>Between ON/OFF</td><td>Power Output Status</td></tr><tr><td>SW ON (0~0.8V)</td><td>ON</td></tr><tr><td>SW OFF (3.3~10V)</td><td>OFF</td></tr></table>	PSU Vo Status	Between RC-(pin1) and RC+(pin2) on CN1	POWER ON	Keep 0~0.8Vdc or open	POWER OFF	Keep 3.3~10Vdc by external voltage	Between ON/OFF	Power Output Status	SW ON (0~0.8V)	ON	SW OFF (3.3~10V)	OFF		
PSU Vo Status	Between RC-(pin1) and RC+(pin2) on CN1															
POWER ON	Keep 0~0.8Vdc or open															
POWER OFF	Keep 3.3~10Vdc by external voltage															
Between ON/OFF	Power Output Status															
SW ON (0~0.8V)	ON															
SW OFF (3.3~10V)	OFF															

COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	PWM Transistor (D to S) or (C to E) Peak Voltage	Q6 Rated 650 V/11 A	AC ON/OFF I/P:High-Line +3V =308V 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/ Min. Load 50%Duty/120Hz (7)0%→400% Load. I/P:Low-Line -3V = 82V 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°C	VDS: (1) 436V (2) 436V (3) 432V (4) 444V (5) 440V (6) 436V (7) 440V VDS: (1) 444V (2) 444V (3) 436V (4) 440V (5) 440V (6) 440V (7) 444V
2	P.F.C Transistor (D to S) or (C to E) Peak Voltage	Q1 Rated 650 V/15A	I/P:High-Line +3V =308V 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.	VDS: (1) 519V (2) 439V (3) 487V (4) 452V (5) 456V (6) 483V (7) 419V

			I/P:Low-Line -3V =82V 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°C	VDS: (1) 491V (2) 447V (3) 487V (4) 460V (5) 464V (6) 463V (7) 451V
3	P.F.C DIODE	D8 Rated 4 A/650V	I/P:High-Line +3V =308 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 I/P:Low-Line -3V = 82V 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°C	(1) 438V (2) 418V (3) 430V (4) 438V (1) 450V (2) 442V (3) 450V (4) 454V
4	Diode Peak Voltage	Q100 Rated 114A/30 V Q101 Rated 114A/30 V	AC ON/OFF I/P:High-Line +3V =308 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/ Min. Load 90%Duty/5KHz (6)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0%→400% Load. (8).NO LOAD Ta:25°C	Q100: VDS: (1) 22.2V (2) 5.4V (3) 21.4V (4) 22V (5) 21.6V (6) 21.4V (7) 8.6V (8) 19V

				Q101: VDS: (1) 20.6V (2) 8.2V (3) 20V (4) 19.6V (5) 19.8V (6) 20V (7) 8.2V (8) 20.6V
5	Input Capacitor Voltage	C5 Rated: 68μ/ 450V Surge voltage:500V	I/P:High-Line +3V =308V 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°C	(1)432V (2)432V (3)448V (4)436V
6	Control IC Voltage Test	PWM IC U2 Rated -0.4 V~ 30 V O/P IC U100 Rated -0.3V~ 38V	AC ON/OFF I/P:High-Line +3V =308 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°C	U2 (1) 19.4V (2) 19.4V (3) 19.4V (4) 19.6V (5) 13V U100 (1) 11.7V (2) 11.7V (3) 11.7V (4) 11.6V (5) 6.8V

■ SAFETY& E.M.C. TEST

SAFETY TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	WITHSTAND VOLTAGE	I/P-O/P: 4.2 K VAC/min I/P-FG : 2.1 K VAC/min O/P-FG: 1.5 KVAC/min	I/P-O/P: 4.62 KVAC/min I/P-FG: 2.52 KVAC/min O/P-FG: 1.8 KVAC/min Ta:25°C	I/P-O/P: 1.916 mA I/P-FG: 1.9 mA O/P-FG: 1.553 mA
2	ISOLATION RESISTANCE	I/P-O/P: 500 VDC>100MΩ I/P-FG: 500 VDC>100MΩ O/P-FG: 500 VDC >100MΩ	I/P-O/P: 500 VDC I/P-FG: 500 VDC O/P-FG: 500 VDC Ta:25°C	I/P-O/P: >9999 MΩ I/P-FG: >9999 MΩ O/P-FG: >9999 MΩ NO DAMAGE
3	GROUNDING CONTINUITY	FG(PE) TO CHASSIS OR TRACE < 100 mΩ	40A / 2min Ta:25°C	10 mΩ

E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	HARMONIC	EN61000-3-2 CLASS A	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	PASS
2	CONDUCTION	BS EN/EN55032(CISPR32),CNS 15936 EN/EN55014-1(CISPR14-1) EN/EN55011(CISPR11)	I/P : 230 VAC (50HZ) O/P : FULL/50% LOAD Ta : 25°C	PASS Test by certified Lab
3	RADIATION	BS EN/EN55032(CISPR32),CNS 15936 EN/EN55014-1(CISPR14-1) EN/EN55011(CISPR11)	I/P : 230 VAC (50HZ) O/P : FULL LOAD Ta : 25°C	PASS Test by certified Lab
4	E.S.D	EN61000-4-2 AIR : 15KV / Contact : 8KV	I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C	CRITERIA A
5	E.F.T	EN61000-4-4 INPUT : 2KV	I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C	CRITERIA A
6	SURGE	IEC61000-4-5 L-N : 2KV L,N-PE : 4KV	I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C	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 : NSP-100-7.5 1. ROOM AMBIENT BURN-IN : 2 HRS I/P : 230VAC O/P : FULL LOAD Ta=27.1 °C 2. HIGH AMBIENT BURN-IN : 2 HRS I/P : 230VAC O/P : FULL LOAD Ta=51.6 °C <table><tr><th>NO</th><th>Position</th><th>ROOM AMBIENT Ta=27.1 °C</th><th>HIGH AMBIENT Ta=51.6 °C</th></tr><tr><td>1</td><td>ZNR1</td><td>40.2°C</td><td>66.0°C</td></tr><tr><td>2</td><td>LF1</td><td>48.3°C</td><td>73.6°C</td></tr><tr><td>3</td><td>C2</td><td>49.5°C</td><td>74.4°C</td></tr><tr><td>4</td><td>C10</td><td>52.3°C</td><td>76.9°C</td></tr><tr><td>5</td><td>L2</td><td>57.2°C</td><td>80.9°C</td></tr><tr><td>6</td><td>Q1</td><td>53.4°C</td><td>77.9°C</td></tr><tr><td>7</td><td>C5</td><td>52.8°C</td><td>77.6°C</td></tr><tr><td>8</td><td>C14</td><td>57.9°C</td><td>84.5°C</td></tr><tr><td>9</td><td>U2</td><td>66.6°C</td><td>90.9°C</td></tr><tr><td>10</td><td>C36</td><td>62.0°C</td><td>86.7°C</td></tr><tr><td>11</td><td>BD1</td><td>53.0°C</td><td>77.4°C</td></tr><tr><td>12</td><td>D8</td><td>53.2°C</td><td>78.5°C</td></tr><tr><td>13</td><td>Q5</td><td>54.6°C</td><td>79.4°C</td></tr><tr><td>14</td><td>Q6</td><td>59.6°C</td><td>84.8°C</td></tr><tr><td>15</td><td>T1</td><td>72.8°C</td><td>98.8°C</td></tr><tr><td>16</td><td>C200</td><td>58.9°C</td><td>85.0°C</td></tr><tr><td>17</td><td>C105</td><td>59.0°C</td><td>85.9°C</td></tr><tr><td>18</td><td>U100</td><td>54.9°C</td><td>80.6°C</td></tr><tr><td>19</td><td>Q100</td><td>62.0°C</td><td>88.2°C</td></tr><tr><td>20</td><td>Q101</td><td>61.1°C</td><td>87.0°C</td></tr><tr><td>21</td><td>RTH3</td><td>53.4°C</td><td>80.1°C</td></tr></table>			NO	Position	ROOM AMBIENT Ta=27.1 °C	HIGH AMBIENT Ta=51.6 °C	1	ZNR1	40.2°C	66.0°C	2	LF1	48.3°C	73.6°C	3	C2	49.5°C	74.4°C	4	C10	52.3°C	76.9°C	5	L2	57.2°C	80.9°C	6	Q1	53.4°C	77.9°C	7	C5	52.8°C	77.6°C	8	C14	57.9°C	84.5°C	9	U2	66.6°C	90.9°C	10	C36	62.0°C	86.7°C	11	BD1	53.0°C	77.4°C	12	D8	53.2°C	78.5°C	13	Q5	54.6°C	79.4°C	14	Q6	59.6°C	84.8°C	15	T1	72.8°C	98.8°C	16	C200	58.9°C	85.0°C	17	C105	59.0°C	85.9°C	18	U100	54.9°C	80.6°C	19	Q100	62.0°C	88.2°C	20	Q101	61.1°C	87.0°C	21	RTH3	53.4°C	80.1°C
NO	Position	ROOM AMBIENT Ta=27.1 °C	HIGH AMBIENT Ta=51.6 °C																																																																																									
1	ZNR1	40.2°C	66.0°C																																																																																									
2	LF1	48.3°C	73.6°C																																																																																									
3	C2	49.5°C	74.4°C																																																																																									
4	C10	52.3°C	76.9°C																																																																																									
5	L2	57.2°C	80.9°C																																																																																									
6	Q1	53.4°C	77.9°C																																																																																									
7	C5	52.8°C	77.6°C																																																																																									
8	C14	57.9°C	84.5°C																																																																																									
9	U2	66.6°C	90.9°C																																																																																									
10	C36	62.0°C	86.7°C																																																																																									
11	BD1	53.0°C	77.4°C																																																																																									
12	D8	53.2°C	78.5°C																																																																																									
13	Q5	54.6°C	79.4°C																																																																																									
14	Q6	59.6°C	84.8°C																																																																																									
15	T1	72.8°C	98.8°C																																																																																									
16	C200	58.9°C	85.0°C																																																																																									
17	C105	59.0°C	85.9°C																																																																																									
18	U100	54.9°C	80.6°C																																																																																									
19	Q100	62.0°C	88.2°C																																																																																									
20	Q101	61.1°C	87.0°C																																																																																									
21	RTH3	53.4°C	80.1°C																																																																																									
2	OVER LOAD BURN-IN TEST	NO DAMAGE 1 HOUR (MIN)	I/P : 230 VAC O/P : 126.3 % LOAD Ta : 25°C	TEST : OK																																																																																								
3	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR	I/P : 85VAC/305VAC O/P : 80/100 % LOAD Ta=-35/-45 °C	TEST : OK																																																																																								
4	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 12 HOURS IN CHAMBER ON CONTROL 50 °C/95 %R.H NO DAMAGE	I/P : 315 VAC O/P : FULL LOAD Ta= 50 °C HUMIDITY= 95 %R.H	TEST : OK																																																																																								
5	TEMPERATURE COEFFICIENT	± 0.05 %/°C(0~60°C)	I/P : 230 VAC O/P : FULL LOAD	± 0.011 %/°C(0~60°C)																																																																																								

6	STORAGE TEMPERATURE TEST	-40~85°C	1. Thermal shock Temperature : -45°C~ +90°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 10 CYCLE 5. Input/Output condition : STATIC
7	THERMAL SHOCK TEST	-30~50°C	1. Thermal shock Temperature : -35°C~ +55°C 2. Temperature change rate : 25°C / 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
8	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°C
9	CAPACITOR LIFE CYCLE	SUPPOSE C105 IS THE MOST CRITICAL COMPONENT (1) I/P : 230VAC O/P : FULL LOAD Ta=25 °C LIFE TIME (2) I/P : 230VAC O/P : FULL LOAD Ta=50 °C LIFE TIME (3) I/P : 230VAC O/P : 75% LOAD Ta=50 °C LIFE TIME (4) I/P : 230VAC O/P : 50% LOAD Ta=50 °C LIFE TIME	(1) 508195HRS (2) 21679HRS (3) 70963HRS (4) 174193HRS
10	MTBF	Conducted by Parts Stress Analysis Prediction 2163.5K hrs min. Telcordia SR-332 (Bellcore) ; 250.4K hrs min. MIL-HDBK-217F (25°C)	
11	Ongoing Reliability Test	I/P : 230VAC O/P : FULL LOAD TA=50°C Demonstration Mean Time Between Failure : 50,000 hours	

TEST RESULT	TESTER	REVIEW	APPROVAL
PASS	WUWQIN/ZHOUBIAO	WENF	WUWQ

2020.10.1 TAG-QA-009