Test Report: UHP-2500-36

2500W Conduction Cooling with PFC Switching Supply

■ DESIGN VERIFY TEST

Output Function Test
Input Function Test
Protection Function Test
Control Function Test
Component Stress Test

■ SAFETY & E.M.C. TEST

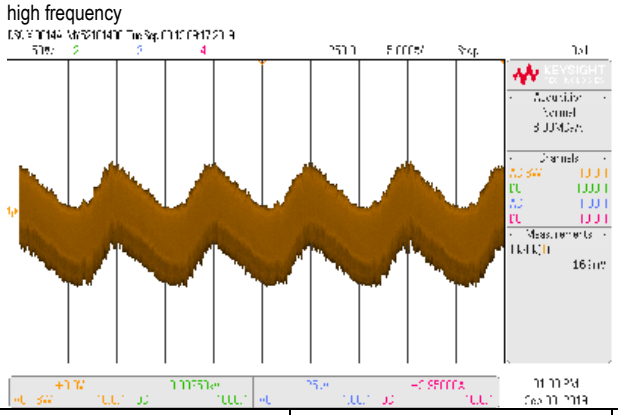
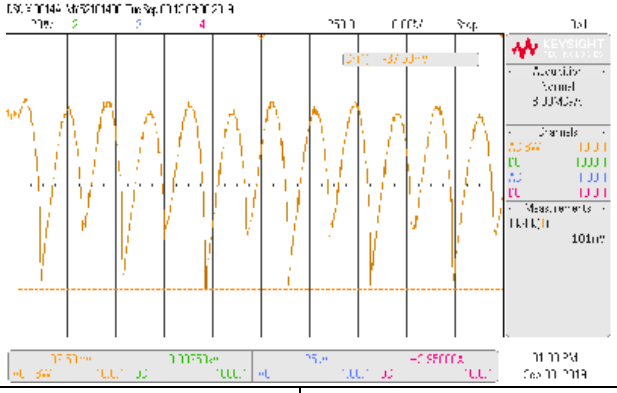
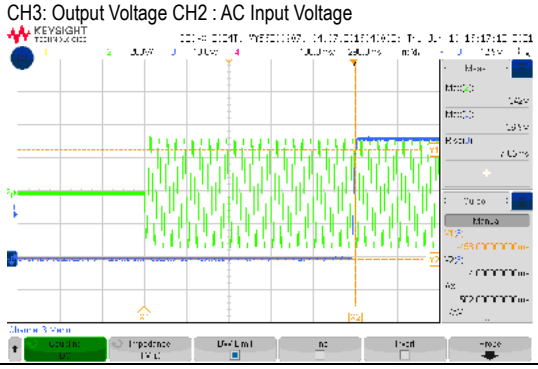
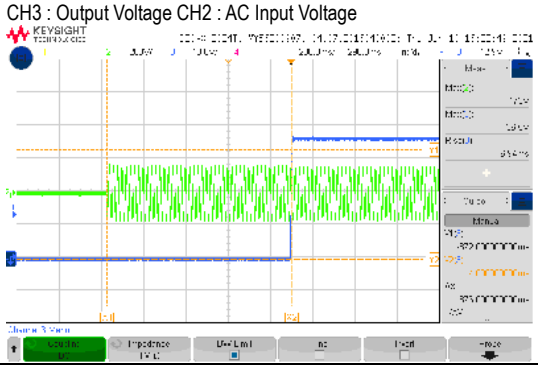
Safety Test
E.M.C. Test

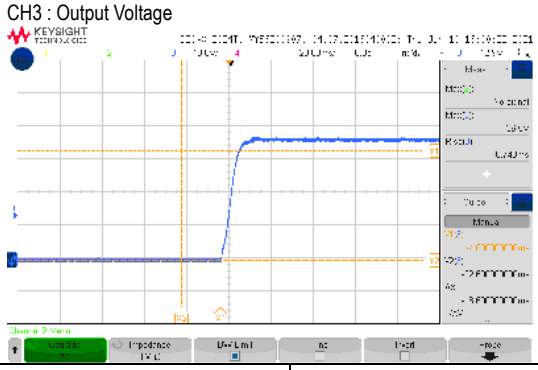
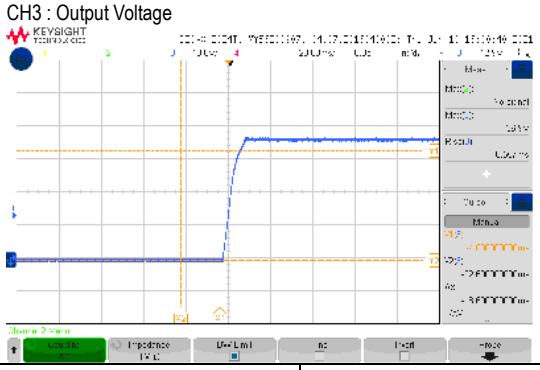
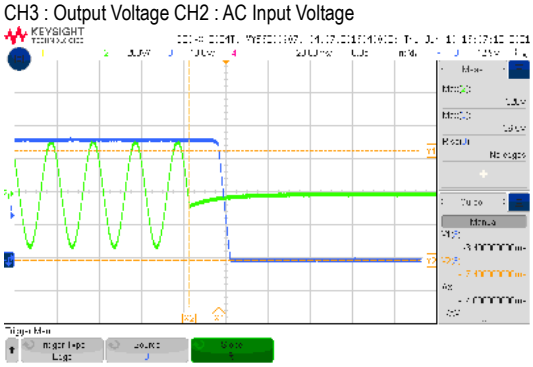
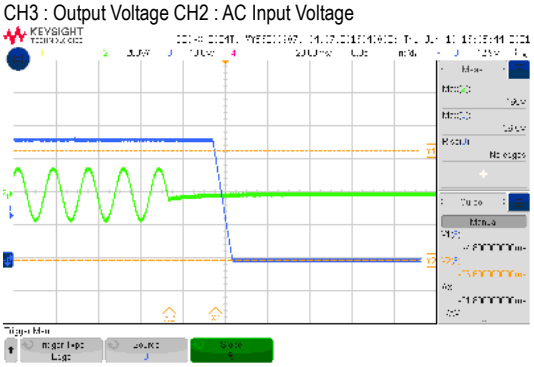
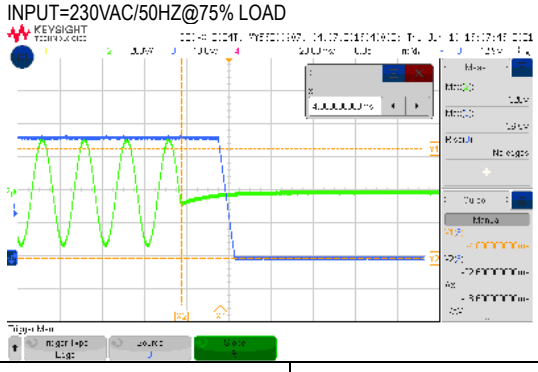
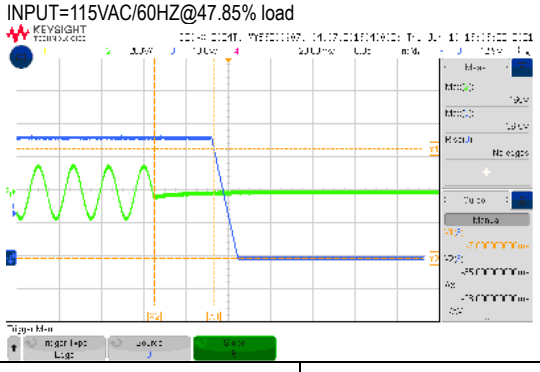
■ RELIABILITY TEST

ENVIRONMENT TEST

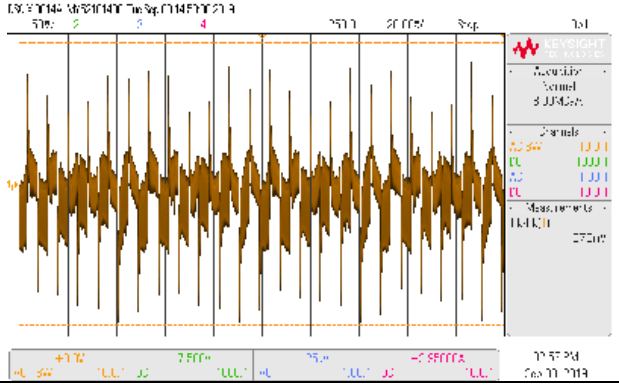
■ DESIGN VERIFY TEST

OUTPUT FUNCTION TEST

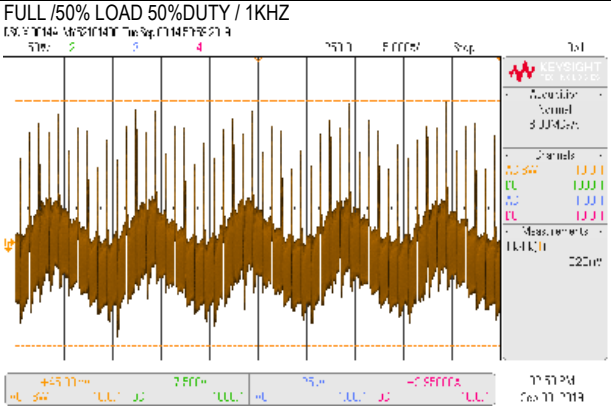
NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OUTPUT VOLTAGE ADJUST RANGE	CH1: 36V~ 43.2 V	I/P 230 VAC I/P 115 VAC O/P MIN LOAD Ta 25 ~	35.066V~44.362V/230VAC 35.055V~44.436V/115VAC
2	OUTPUT VOLTAGE(Max) TOLERANCE	V1: 1%~ -1 %	I/P: 180VAC /264VAC O/P:FULL/ MIN. LOAD Ta:25 ~	V1: 0.028%~ -0.028%
3	LINE REGULATION (Max)	V1: 0.5%~- 0.5 %	I/P: 180VAC~ 264VAC O/P:FULL LOAD Ta:25 ~	V1: 0.028%~ 0%
4	LOAD REGULATION(Max)	V1: 1%~ - 1%	I/P: 230VAC O/P:FULL ~MIN LOAD Ta:25 ~	V1: 0.028%~ -0.028%
5	OVER/UNDERSHOOT TEST	< ±5%	I/P: 230VAC O/P:FULL LOAD Ta:25 ~	< 5%
6	RIPPLE & NOISE(Max)	V1: 360 mVp-p	I/P:230VAC O/P:FULL LOAD Ta:25 ~	V1:169 mVp-p
	high frequency 		low frequency 	
7	SET UP TIME(Max)	230VAC/1500ms 115VAC/1500ms Derating may be needed under low input voltages. Please check the derating curve and Static characteristics for more details	I/P 230 VAC O/P FULL LOAD I/P 115 VAC O/P 63.8% LOAD Ta 25 ~	230VAC/ 502ms 115VAC/ 876ms
	INPUT=230VAC/50HZ @ FULL LOAD CH3: Output Voltage CH2 : AC Input Voltage 		INPUT=115VAC/60HZ @ 63.8% LOAD CH3 : Output Voltage CH2 : AC Input Voltage 	

8	RISE TIME (Max)	230VAC/50ms 115VAC/60ms Derating may be needed under low input voltages. Please check the derating curve and Static characteristics for more details	I/P 230 VAC O/P FULL LOAD I/P 115 VAC O/P 63.8% LOAD Ta 25 ~	230VAC/ 6.74 ms 115VAC/ 6.55 ms
	INPUT=230VAC/50HZ @ FULL LOAD CH3 : Output Voltage 		INPUT=115VAC/60HZ @ 63.8% LOAD CH3 : Output Voltage 	
9	HOLD UP TIME (Typ.)	230、115VAC/10ms at full load 230、115VAC/16ms at 75% load Derating may be needed under low input voltages. Please check the derating curve and Static characteristics for more details	I/P 230 VAC O/P FULL LOAD/75% LOAD I/P 115 VAC O/P 63.8% LOAD/47.85% LOAD Ta 25 ~	230VAC/ 14 ms at full load 230VAC/ 18.6 ms at 75% load 115VAC/ 21.8 ms at 63.8% load 115VAC/ 28 ms at 47.85% load
	INPUT=230VAC/50HZ @ FULL LOAD CH3 : Output Voltage CH2 : AC Input Voltage 		INPUT=115VAC/60HZ @ 63.8% LOAD CH3 : Output Voltage CH2 : AC Input Voltage 	
	INPUT=230VAC/50HZ@75% LOAD 		INPUT=115VAC/60HZ@47.85% load 	
10	DYNAMIC LOAD	V1: 3600 mVp-p	I/P: 230VAC O/P: (1)FULL /50% LOAD 50%DUTY / 120HZ (2)FULL /50% LOAD 50%DUTY / 1KHZ Ta:25 ~	 372mVp-p 322mVp-p

FULL /50% LOAD 50%DUTY / 120HZ



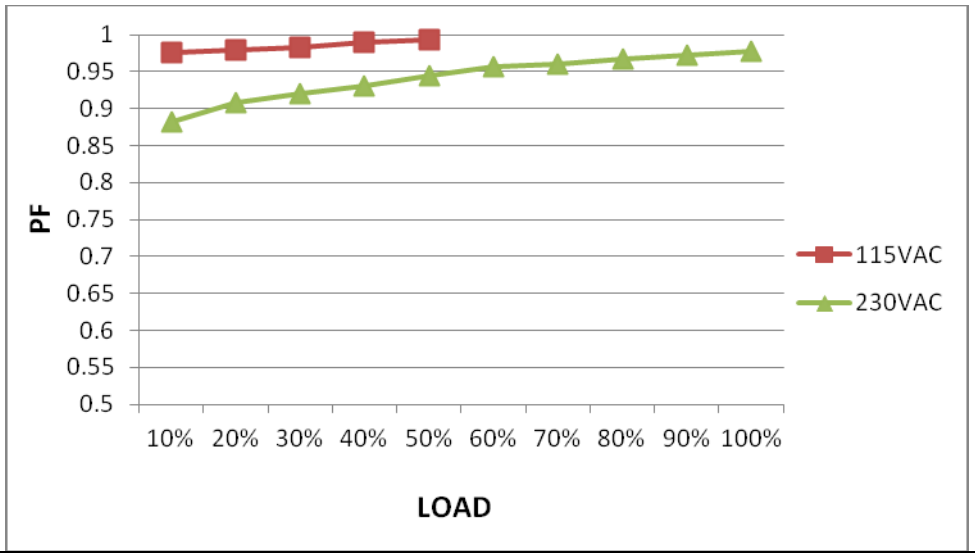
FULL /50% LOAD 50%DUTY / 1KHZ

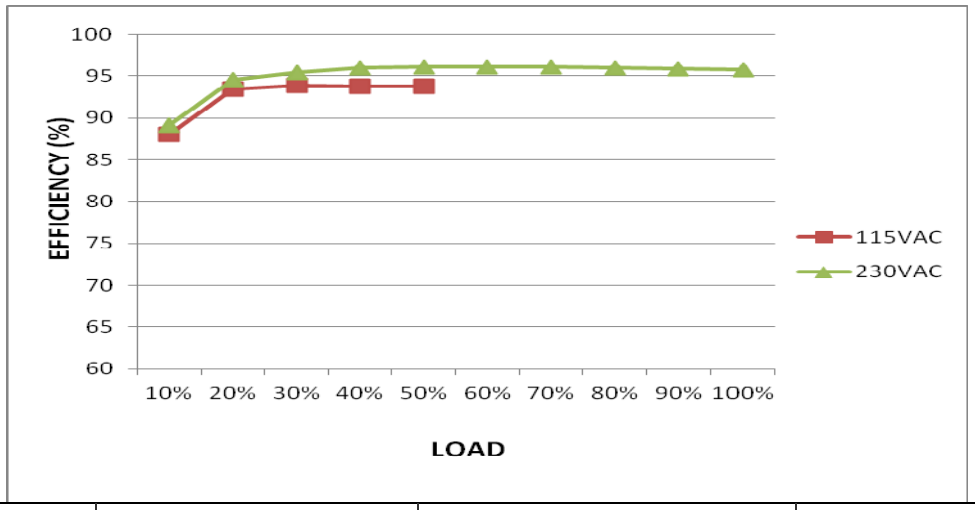
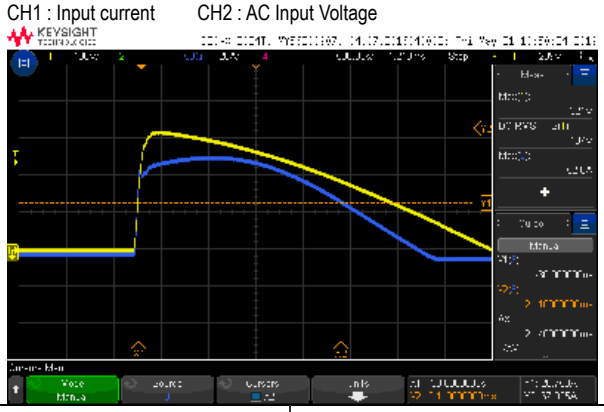
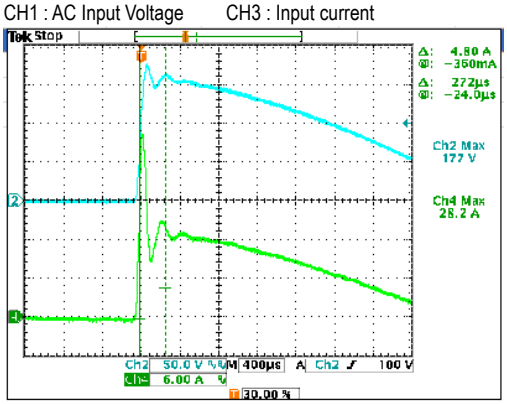


INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	INPUT VOLTAGE RANGE	90VAC~264VAC	I/P:TESTING O/P:FULL LOAD / Derating Load Ta:25 ~	166V~264V@ FULL LOAD 83V~264V (50%)
			I/P: LOW-LINE-3V=177 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/ 14.3 A	I/P 230 VAC O/P FULL LOAD Ta 25 ~	I =11.74A/ 230VAC
4	LEAKAGE CURRENT	< 0.75mA / 240 VAC	I/P 240 VAC O/P Min LOAD Ta 25 ~	L-FG 0.66 mA N-FG 0.66 mA
5	POWER FACTOR (Typ.)	0.95/ 230VAC	I/P 230 VAC O/P FULL LOAD Ta 25 ~	PF=0.977/230VAC

P.F vs LOAD



6	EFFICIENCY(Typ.)	95.5%	I/P:230 VAC O/P:FULL LOAD Ta:25 ~	95.78%
	EFFICIENCY vs LOAD 			
7	INRUSH CURRENT(Typ.)	230V/60A 115V/30A COLD START	I/P 230 VAC I/P 115 VAC O/P FULL LOAD Ta 25 ~	I =52.6A/ 230VAC T50= 2140 us I =28.2A / 115VAC
	INPUT=230VAC/50HZ @ FULL LOAD CH1 : Input current CH2 : AC Input Voltage 		INPUT=115VAC/60HZ @ FULL LOAD CH1 : AC Input Voltage CH3 : Input current 	
8	NO LOAD CONSUMPTION	---	I/P : 115VAC I/P : 230VAC O/P : NO LOAD Ta : 25℃	9.68 W/115VAC 6.12 W/230VAC

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OVER LOAD PROTECTION	105%~ 115 %(180VAC~264VAC) 52.5%~57.5%(90VAC) Protection type : Constant current limiting, shut down O/P voltage 5 sec. after O/P voltage is down low, re-power on to recover	I/P: 264VAC I/P: 230VAC I/P: 180VAC I/P: 90VAC O/P:TESTING Ta:25 ~	111.45%/ 264VAC 111.45%/ 230VAC 111.45%/180VAC 53.45%/90VAC PROTECTION TYPE Constant current limiting, shut down O/P voltage 5 sec. after O/P voltage is down low, re-power on to recover

2	OVER VOLTAGE PROTECTION	45V~51V Protection type : Shut down O/P voltage,re-power on to recover	I/P: 264VAC I/P: 230VAC I/P: 90VAC O/P:MIN LOAD Ta:25 ~	47.52V/ 264VAC 47.71V/ 230VAC 47.59V/ 90VAC PROTECTION TYPE Shut down 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 Protection type : Constant current limiting, shut down O/P voltage 5 sec. after O/P voltage is down low, re-power on to recover	I/P: 264VAC I/P: 90VAC O/P: FULL LOAD Ta:25 ~	NO DAMAGE PROTECTION TYPE Constant current limiting, shut down O/P voltage 5 sec. after O/P voltage is down low, re-power on to recover

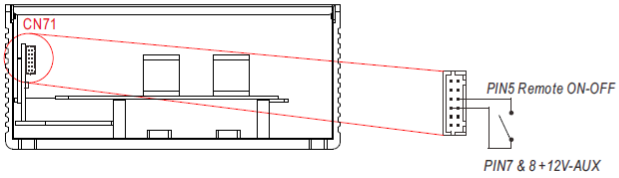
CONTROL FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	AUXILIARY POWER (AUX)	I/P: 230 VAC O/P:FULL LOAD Ta:25℃ Test Result		

AUX	TOLERANCE	RIPPLE	TEST RESULT
12V / 0.4A	10.8~13.2 V	150mVp-p	11.6V /102mv

2 REMOTE ON/OFF CONTROL

The power supply can be turned ON/OFF individually or along with other units in parallel by using the "Remote ON-OFF" function.

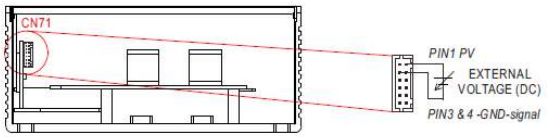


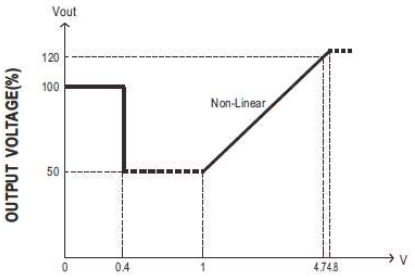
Remote ON-OFF	Power Supply Status
Short circuit	ON
Open circuit	OFF

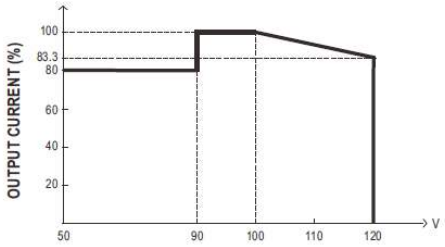
I/P: 230 VAC
O/P:FULL LOAD
Ta:25℃
Test Result

Between ON/OFF and +5V-AUX	Power Supply Status
SW SHORT	ON
SW OPEN	OFF

3	OUTPUT VOLTAGE PROGRAMMABLE(PV)	**1.Output Voltage Programming (or, PV / remote voltage programming / remote adjust / margin programming / dynamic voltage trim)** ※ In addition to the adjustment via the built-in potentiometer, the output voltage can be trimmed by applying EXTERNAL VOLTAGE.





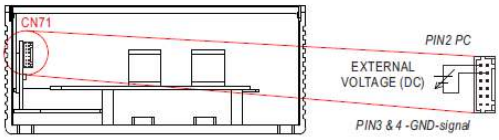


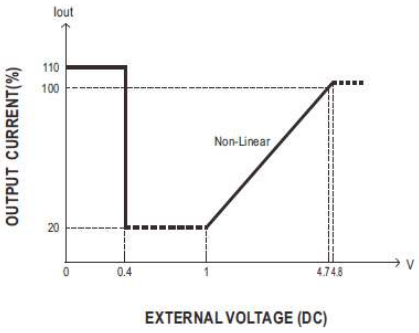
◎ The rated current should change with the Output Voltage Programming accordingly.

I/P: 230 VAC
O/P:FULL LOAD
Ta:25℃
TEST RESULT

PV / MODEL	0.4V	1V	4.7V	4.8V
SPEC	36V±5%	18V±5%	43.2V±5%	43.88V±5%
Vout	36.11V	18.02V	43.21V	44.04V

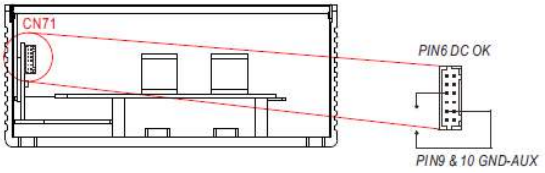
4	OUTPUT CURRENT PROGRAMMABLE (PC)	※ The output current can be trimmed to 20~100% of the rated current by applying EXTERNAL VOLTAGE.





I/P: 230 VAC
O/P:TESTING
Ta:25℃

ADJ V	<0.4V	1V	4.7V	4.8V
SPEC	110%±10%	20%±10%	100%±10%	102.2%±10%
TEST	110.3%	20.4%	100%	102.6%

5	DC OK CONTACT RATINGS	DC-OK signal is a TTL level signal. The maximum sourcing current is 10mA.  I/P: 230 VAC O/P:TESTING Ta:25℃

DC-OK signal	Power Supply Status
"High" >4.5~5.5V	ON
"Low" <-0.5~0.5V	OFF

DC-OK signal	Power Supply Status
"High" >4.5~5.5V	ON(5.06v)
"Low" <-0.5~0.5V	OFF(-0.09V)

COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	PWM Transistor (D to S) or (C to E) Peak Voltage	Q903 Rated : 76A/ 650 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/ Min. Load 50%Duty/120Hz (7)0% 400% Load. I/P:Low-Line -3V = 177V 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) 509V (2) 505V (3)509V (4) 505V (5) 505V (6) 505V (7) 481V VDS: (1) 489V (2) 497V (3)497V (4) 497V (5) 497V (6) 497V (7) 497V
2	P.F.C Transistor (D to S) or (C to E) Peak Voltage	Q 52 Rated : 52A/ 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	 VDS: (1) 525V (2) 524V (3)533V (4) 529V (5) 525 (6) 521V (7) 457V

			(6)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz (7)0% 400% Load. I/P:Low-Line -3V = 177V 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) 521V (2) 528V (3) 525V (4) 529V (5) 521V (6) 521V (7) 457V
3	P.F.C DIODE	D 10 Rated : 10 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 I/P:Low-Line -3V = 177V 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) 465V (2) 409V (3) 457V (4) 441V (1) 449V (2) 396V (3) 453V (4) 453V
4	Diode Peak Voltage	Q101 Rated : 87A/ 150 V Q105 Rated : 87A/ 150 V Q109 Rated : 87A/ 150 V Q113 Rated : 87A/ 150 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. (8).NO LOAD (9) burst Mode Ta:25 ~	Q101: Q109: VDS: VDS: (1) 104.8V (1) 103.4V (2) 29.2V (2) 25.4V (3) 105.6V (3) 103.4V (4) 104V (4) 102.6V (5) 106.4V (5) 104.2V (6) 104V (6) 102.6V (7) 104.8V (7) 101.8V (8) 93.5V (8) 93.8V (9) 92.7V (9) 91.4V Q105: Q113: VDS: VDS: (1) 105.7V (1) 104.2V (2) 21.3V (2) 23.0V (3) 92.9V (3) 105V (4) 92.9V (4) 105V (5) 94.5V (5) 105V (6) 92.9V (6) 101.8V (7) 108.9V (7) 104.2V (8) 92V (8) 92.2V (9) 92.9V (9) 93V

5	Input Capacitor Voltage	C5 Rated: 105 ~/ CLA Series Surge Voltage 495V	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) 405V (2) 421V (3) 437V (4) 413V
6	Control IC Voltage Test	PWM IC U800 Rated 8.85V~ 16V(Vz) PFC IC U401 Rated 22V MCU IC U701 Rated 2.0V~4V	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) 13.08V (2) 12.75V (3) 13.08V (4) 12.67V (5) 12.67V U401: (1) 12.67V (2) 12.59V (3) 12.75V (4) 12.27V (5) 12.43V U701: (1) 3.48V (2) 3.40V (3) 3.48V (4) 3.28V (5) 3.36V
7	TOP SWITCHING STAND BY POWER	U601 Rated : 3.5A/ 800 V	AC ON/OFF I/P:High-Line +3V =267 V O/P: (1)Full Load (2)Remote On/Off I/P:Low-Line -3V =97 V O/P: (1)Full Load (2)Remote On/Off Ta:25 ~	U601 (1) 540V/ 789mA (2) 552V/ 805mA (1) 544V/ 772mA (2) 552V/ 789mA
8	Capacitor Voltage	C652 Rated 100uF/ 25V C682 Rated 100uF/ 25V	AC ON/OFF 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 ~	C652: (1) 14V (2) 14V (3) 13.4V (4) 13.4V C682 (1) 14.4V (2) 14.4V (3) 14.6V (4) 14.4V

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:1..25KVAC/min	I/P-O/P: 3.6 KVAC/min I/P-FG: 2.4 KVAC/min O/P-FG:1.5KVAC/min Ta:25 ~	I/P-O/P:9.4 Ma I/P-FG: 9.4mA O/P-FG: 5.8m 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: 3.98GΩ I/P-FG: 4.01GΩ O/P-FG: 3.83GΩ NO DAMAGE
3	GROUNDING CONTINUITY	FG(PE) TO CHASSIS OR TRACE < 100 mΩ	40A / 2min Ta:25 ~	23mΩ

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℃	PASS
2	CONDUCTION	EN55032 CLASS B	I/P 230 VAC (50HZ) O/P FULL/50% LOAD Ta 25℃	PASS Test by certified Lab
3	RADIATION	EN55032 CLASS A	I/P 230 VAC (50HZ) O/P FULL LOAD Ta 25℃	PASS Test by certified Lab
4	E.S.D	EN61000-4-2 INDUSTRY AIR：8KV / Contact：4KV	I/P 230 VAC/50HZ O/P FULL LOAD Ta 25 ~	CRITERIA A
5	E.F.T	EN61000-4-4 INDUSTRY INPUT 2KV	I/P 230 VAC/50HZ O/P FULL LOAD Ta 25 ~	CRITERIA A
6	SURGE	IEC61000-6-2 INDUSTRY L-N 2KV L,N-PE 4KV	I/P 230 VAC/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 UHP-2500-36 (AMBIENT TEMPERATURE WITH FORCED AIR COOLING) 1. ROOM AMBIENT BURN-IN 2 HRS I/P 230VAC O/P FULL LOAD Ta=25 ~ 2. HIGH AMBIENT BURN-IN 2 HRS I/P 230VAC O/P FULL LOAD Ta= 50 ~		

NO	Position	ROOM AMBIENT Ta= 25 ~	HIGH AMBIENT Ta= 50 ~
1	BD1	77.4 ~	101.0 ~
2	ZNR3	63.1 ~	85.7 ~
3	L1	66.5 ~	88.6 ~
4	L3	65.9 ~	88.6 ~
5	D10	76.3 ~	101.0 ~
6	Q52	68.3 ~	92.6 ~
7	Q66	66.0 ~	90.3 ~
8	Q901	68.2 ~	93.2 ~
9	Q902	68.7 ~	93.9 ~
10	T1 WIRE	73.7 ~	96.5 ~
11	T2 WIRE	74.1 ~	97.4 ~
12	C10	64.7 ~	86.5 ~
13	T51	69.5 ~	92.3 ~
14	C968	71.2 ~	94.2 ~
15	C962	65.0 ~	88.6 ~
16	D14	77.0 ~	101.1 ~
17	Q907	61.5 ~	85.3 ~
18	Q912	63.3 ~	81.5 ~
19	D980	62.2 ~	83.8 ~
20	Q105	64.9 ~	90.7 ~
21	Q113	69.0 ~	94.7 ~
22	U151	56.7 ~	83.6 ~
23	U401	74.0 ~	96.9 ~
24	T601	68.9 ~	92.8 ~
25	RG61	59.5 ~	85.2 ~
26	C652	62.7 ~	89.0 ~
27	U701	45.3 ~	71.5 ~
28	C116	51.4 ~	74.6 ~
29	C117	50.2 ~	74.8 ~
30	RY1	67.3 ~	89.1 ~
31	RTH4	67.8 ~	93.3 ~
32	RTH5	68.3 ~	94.0 ~
33	RT21	76.0 ~	99.4 ~
34	LF1	78.7 ~	102.0 ~
35	LF4	72.0 ~	97.2 ~

2	OVER LOAD BURN-IN TEST	NO DAMAGE 1 HOUR (MIN)	I/P 230 VAC O/P 110 LOAD Ta 25 ~	TEST OK
3	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR	I/P 264VAC/180VAC O/P 100 LOAD Ta= -35 ~/-30 ~	TEST OK
4	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 12 HOURS IN CHAMBER ON CONTROL 50 ~/95 %R.H NO DAMAGE	I/P 272 VAC O/P FULL LOAD Ta= 50 ~ HUMIDITY= 95 %R.H	TEST OK
5	TEMPERATURE COEFFICIENT	± 0.03 %/ ~(0~50 ~)	I/P 230 VAC O/P FULL LOAD	± 0.002 %/ ~(0~50 ~)

6	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	
7	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	
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℃	
9	CAPACITOR LIFE CYCLE	SUPPOSE C116 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= 45 ~ LIFE TIME (3) I/P 230VAC O/P 75% LOAD Ta= 45 ~ LIFE TIME (4) I/P 230VAC O/P 50% LOAD Ta= 45 ~ LIFE TIME		(1) 498983HRS (2) 99930HRS (3) 193310HRS (4) 292876HRS
10	MTBF	Conducted by Parts Stress Analysis Prediction 166.12K hrs min. Telcordia SR-332 (Bellcore) ; 48.91K hrs min. MIL-HDBK-217F (25 ~)		
11	Ongoing Reliability Test	I/P 230VAC O/P FULL LOAD TA=50℃ Demonstration Mean Time Between Failure : 50,000 hours		

TEST RESULT	TESTER	REVIEW	APPROVAL
PASS	DANIEL GAO	SANFORD SU	VINCENT TSENG

2018.4.30 GP-A50-F010