



Test Report: DPU -3200-48

3200W Power Supply with Single Output

■ 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

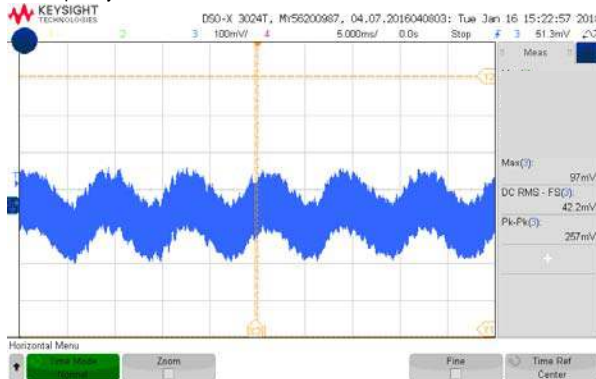
OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OUTPUT VOLTAGE ADJUST RANGE	CH1: 47.5 V~ 58.8V	I/P : 230 VAC I/P : 115 VAC O/P : MIN LOAD Ta : 25°C	45.55V~ 61.78V/230VAC 45.55V~ 61.78V/115VAC
2	OUTPUT VOLTAGE(Max) TOLERANCE	V1: 1 %~ -1 %	I/P: 180VAC /264VAC O/P:FULL/ MIN. LOAD Ta:25°C	V1: 0.14%~-0.14%
3	LINE REGULATION (Max)	V1: 0.5 %~ -0.5 %	I/P: 180VAC~ 264VAC O/P:FULL LOAD Ta:25°C	V1: 0%~-0.042%
4	LOAD REGULATION(Max)	V1: 0.5 %~ -0.5 %	I/P: 230VAC O/P:FULL ~MIN LOAD Ta:25°C	V1: 0.083%~ - 0.124%
5	OVER/UNDERSHOOT TEST	< ±10%	I/P: 230VAC O/P:FULL LOAD Ta:25°C	< 10%
6	RIPPLE & NOISE(Max)	V1: 480 mVp-p	I/P:230VAC O/P:FULL LOAD Ta:25°C	V1: 257 mVp-p

high frequency :



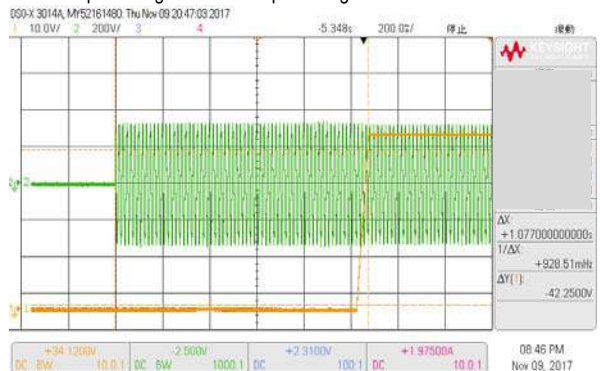
low frequency :



7	SET UP TIME(Max)	230VAC/1500ms	I/P : 230 VAC O/P : FULL LOAD Ta : 25°C	230VAC/ 1077ms
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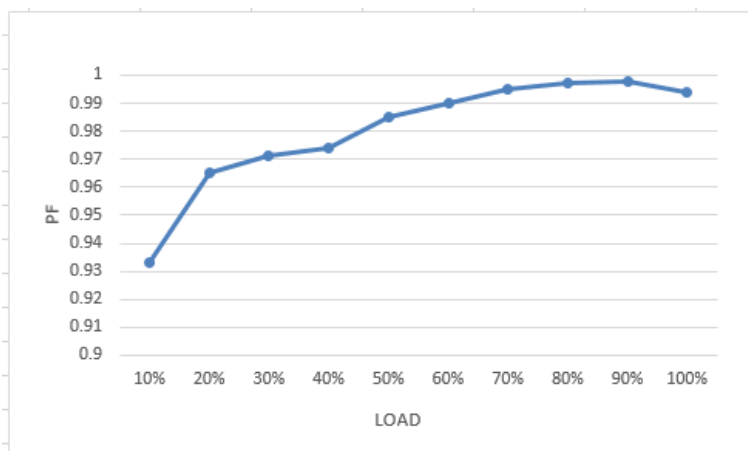
INPUT=230VAC/50HZ @ FULL LOAD

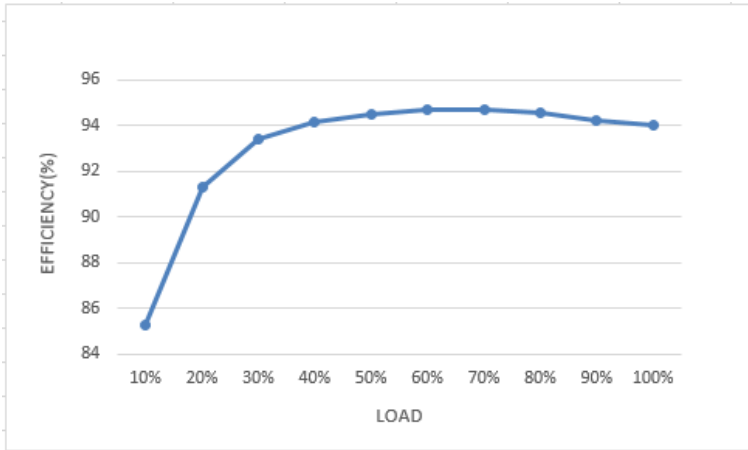
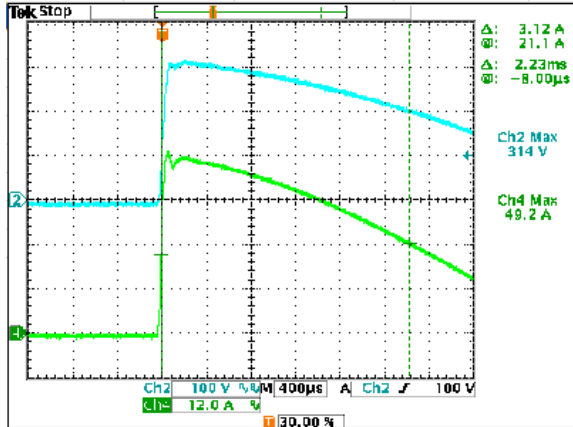
CH1 : Output Voltage CH2 : AC Input Voltage



8	RISE TIME (Max)	230VAC/60ms	I/P : 230 VAC O/P : FULL LOAD Ta : 25°C	230VAC/ 38.8ms
INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage 				
9	HOLD UP TIME (Typ.)	230VAC 75%/ 16ms 230VAC 100%/9ms	I/P : 230 VAC O/P : 75% LOAD O/P : 100% LOAD Ta : 25°C	34.76ms (75% load) 10.4ms (100% load)
INPUT=230VAC/50HZ @75% LOAD CH1 : Output Voltage CH2 : AC Input V 				
INPUT=230VAC/50HZ @100% LOAD CH1 : Output Voltage CH2 : AC Input Voltage 				
10	DYNAMIC LOAD	V1: 4800 mVp-p	I/P: 230VAC O/P: (1)FULL /50% LOAD 50%DUTY / 120HZ (2)FULL /50% LOAD 50%DUTY / 1KHZ Ta:25°C	155Vp-p 565mVp-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 127VDC~370VDC	(1) I/P: AC TESTING O/P: FULL / 50% 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) 162Vac~264Vac/FULL LOAD 84Vac~264Vac/50%LOAD (2) 246Vdc~370Vdc/FULL LOAD 112Vdc~370Vdc/50% LOAD (3) 246Vdc~370Vdc/FULL LOAD 111Vdc~370Vdc/50% LOAD																						
			I/P: (1) LOW-LINE-3V=87V HIGH-LINE+15%V=300V O/P: FULL/MIN LOAD (PLEASE CHECK DERATING CURVE) ON: 30 Sec OFF: 30 Sec 10MIN (2) 230Vac ON: 0.5 Sec OFF: 0.5 Sec 20MIN (3) 230Vac ON: 3Sec OFF: 3Sec 12HOURS (POWER ON/OFF NO DAMAGE) Ta: 25°C	TEST: OK																						
2	INPUT FREQUENCY RANGE	47HZ ~63 HZ NO DAMAGE	I/P: 180 VAC ~264 VAC O/P: FULL ~MIN LOAD Ta: 25°C	TEST: OK																						
3	INPUT CURRENT (Typ.)	230V/ 17 A	I/P : 230 VAC O/P : FULL LOAD Ta : 25°C	I = 15.19A/ 230VAC																						
4	LEAKAGE CURRENT	<2 mA / 230 VAC	I/P : 230 VAC O/P : Min LOAD Ta : 25°C	L-FG : 0.7 mA N-FG : 0.7 mA																						
5	POWER FACTOR (Typ.)	0.97 / 230VAC	I/P : 230 VAC O/P : FULL LOAD Ta : 25°C	PF= 0.992/230VAC																						
P.F vs LOAD																										
 <table><caption>P.F vs LOAD Data Points (Estimated)</caption><thead><tr><th>LOAD (%)</th><th>P.F.</th></tr></thead><tbody><tr><td>10</td><td>0.93</td></tr><tr><td>20</td><td>0.965</td></tr><tr><td>30</td><td>0.97</td></tr><tr><td>40</td><td>0.975</td></tr><tr><td>50</td><td>0.985</td></tr><tr><td>60</td><td>0.99</td></tr><tr><td>70</td><td>0.992</td></tr><tr><td>80</td><td>0.994</td></tr><tr><td>90</td><td>0.995</td></tr><tr><td>100</td><td>0.995</td></tr></tbody></table>					LOAD (%)	P.F.	10	0.93	20	0.965	30	0.97	40	0.975	50	0.985	60	0.99	70	0.992	80	0.994	90	0.995	100	0.995
LOAD (%)	P.F.																									
10	0.93																									
20	0.965																									
30	0.97																									
40	0.975																									
50	0.985																									
60	0.99																									
70	0.992																									
80	0.994																									
90	0.995																									
100	0.995																									
6	EFFICIENCY(Typ.)	94.5% / (75% LOAD)	I/P: 230 VAC O/P: 75% LOAD Ta: 25°C	94.59%																						

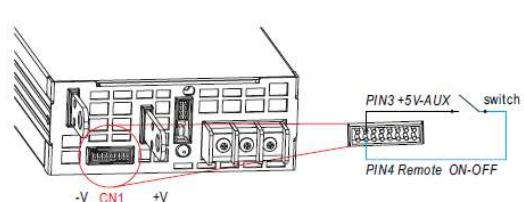
EFFICIENCY vs LOAD 				
7	INRUSH CURRENT(Typ.)	230V/55 A COLD START	I/P : 230 VAC O/P : FULL LOAD Ta : 25°C	I = 49.2A/ 230VAC T50= 2230us/230V
INPUT=230VAC/50HZ @ FULL LOAD CH4 : Input current CH2: input voltage 				

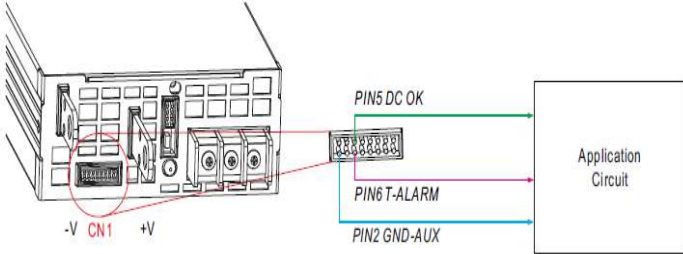
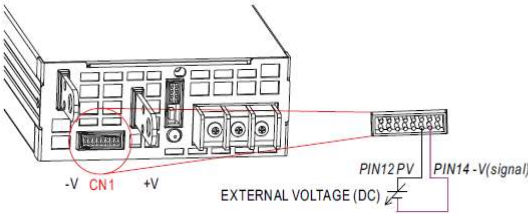
PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OVER LOAD PROTECTION	105 %~ 115 % 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 O/P: TESTING Ta:25°C	110%/ 264VAC 110%/ 230VAC 110%/180VAC 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	63V~ 75 V 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°C	68.2V/ 264VAC 68.2V/ 230VAC 68.11V/ 90VAC PROTECTION TYPE : Shut down o/p voltage, re-power on to recover
3	OVER TEMPERATURE PROTECTION	NO DAMAGE PROTECTION TYPE : Shut down o/p voltage, recovers automatically after temperature goes down	I/P: 264VAC I/P: 180VAC 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°C	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
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CONTROL FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT												
1	AUXILIARY POWER (AUX)	1.Auxiliary voltage output, 10.6~13.2V, referenced to GND-AUX (pin2). The maximum load current is 0.8A. This output has the built-in "Oring diodes" and is not controlled by "Remote ON-OFF". 2.Auxiliary voltage output, 4.5~5.5V, referenced to GND-AUX (pin2). The maximum load current is 0.3A. This output has the built-in "Oring diodes" and is not controlled by "Remote ON-OFF" I/P: 230 VAC O/P:FULL LOAD Ta:25°C Test Result : <table><thead><tr><th>AUX</th><th>TOLERANCE</th><th>RIPPLE</th><th>TEST RESULT</th></tr></thead><tbody><tr><td>12V / 0.8A</td><td>10.8~13.2 V</td><td>450mVp-p</td><td>12.096V 0.8A 121 mVp-p</td></tr><tr><td>5V / 0.3A</td><td>4.5 ~ 5.5V</td><td>150mVp-p</td><td>4.73V/0.3A 117 mVp-p</td></tr></tbody></table>			AUX	TOLERANCE	RIPPLE	TEST RESULT	12V / 0.8A	10.8~13.2 V	450mVp-p	12.096V 0.8A 121 mVp-p	5V / 0.3A	4.5 ~ 5.5V	150mVp-p	4.73V/0.3A 117 mVp-p
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5V / 0.3A	4.5 ~ 5.5V	150mVp-p	4.73V/0.3A 117 mVp-p													
2	REMOTE ON/OFF CONTROL	※ The power supply can be turned ON/OFF individually or along with other units by using the "Remote ON-OFF" function. <table><thead><tr><th>Between Remote ON-OFF and +5V-AUX</th><th>Power Supply Status</th></tr></thead><tbody><tr><td>Switch Short</td><td>ON</td></tr><tr><td>Switch Open</td><td>OFF</td></tr></tbody></table> I/P: 230 VAC O/P:FULL LOAD Ta:25°C Test Result : <table><thead><tr><th>Between ON/OFF and +5V-AUX</th><th>Power Supply Status</th></tr></thead><tbody><tr><td>SW SHORT</td><td>ON</td></tr><tr><td>SW OPEN</td><td>OFF</td></tr></tbody></table>			Between Remote ON-OFF and +5V-AUX	Power Supply Status	Switch Short	ON	Switch Open	OFF	Between ON/OFF and +5V-AUX	Power Supply Status	SW SHORT	ON	SW OPEN	OFF
Between Remote ON-OFF and +5V-AUX	Power Supply Status															
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Between ON/OFF and +5V-AUX	Power Supply Status															
SW SHORT	ON															
SW OPEN	OFF															
3	REMOTE SENSE	S+ / S- >0.5V 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												

4	ALARM SIGNAL	※ There are 2 alarm signals, DC OK and T-ALARM, in TTL signal form, on CN1. These signals are isolated from output. The maximum sink current is 10mA.  1. DC OK SIGNAL High (4.5 ~ 5.5V) : When the $V_{out} \leq 80\% \pm 5\%$. Low (-0.1 ~ 0.5V) : When $V_{out} \geq 80\% \pm 5\%$. The maximum sourcing current is 10mA and only for output. I/P: 230 VAC O/P: FULL LOAD Ta: 25°C Test Result : <table><tr><th>Vout</th><th>DC OK SIGNAL</th></tr><tr><td>$V_{out} \leq 75\%$</td><td>4.92V</td></tr><tr><td>$V_{out} \geq 85\%$</td><td>0.0087v</td></tr></table> 2. T-ALARM High (4.5 ~ 5.5V) : When the internal temperature exceeds the limit of temperature alarm, or when Fan fails. Low (-0.1 ~ 0.5V) : When the internal temperature is normal, and when Fan works normally. The maximum sourcing current is 10mA and only for output I/P: 230 VAC O/P: FULL LOAD Ta: 25°C Test Result : <table><tr><th>P.SU STATUS</th><th>Vo</th><th>T-ALARM SPEC</th><th>T-ALARM TEST</th></tr><tr><td>NORMAL</td><td>100%±2%</td><td>-0.1 ~ 0.5V</td><td>-0.0975V</td></tr><tr><td>OTP</td><td>0V</td><td>4.5~5.5V</td><td>5.003V</td></tr><tr><td>FAN LOCK</td><td>0V</td><td>4.5~5.5V</td><td>5.003V</td></tr></table>	Vout	DC OK SIGNAL	$V_{out} \leq 75\%$	4.92V	$V_{out} \geq 85\%$	0.0087v	P.SU STATUS	Vo	T-ALARM SPEC	T-ALARM TEST	NORMAL	100%±2%	-0.1 ~ 0.5V	-0.0975V	OTP	0V	4.5~5.5V	5.003V	FAN LOCK	0V	4.5~5.5V	5.003V
Vout	DC OK SIGNAL																							
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OTP	0V	4.5~5.5V	5.003V																					
FAN LOCK	0V	4.5~5.5V	5.003V																					
5	OUTPUT VOLTAGE PROGRAMMABLE(PV)	. 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 to 50~125% of the nominal voltage by applying EXTERNAL VOLTAGE.  © For Remote Sense / Local Sense, please refer to "Voltage Drop Compensation" section.																						

5

OUTPUT VOLTAGE (%)

EXTERNAL VOLTAGE (DC)

OUTPUT CURRENT (%)

OUTPUT VOLTAGE (%)

⦿ The rated current should change with the Output Voltage Programming accordingly.
⦿ For Remote Sense / Local Sense, please refer to "Voltage Drop Compensation" section.

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

PV	<0.4V	1V	3.479V	4.7V	5V
MODEL					
SPEC	48V±5%	24V±5%	48V±5%	60V±5%	60V±5%
Vout	48.167V	23.89V	48.29V	60.5 V	61.76V

6

OUTPUT CURRENT PROGRAMMABLE (PC)

-V CN1 +V

EXTERNAL VOLTAGE (DC)

PIN11 PC

PIN14 -V (signal)

⦿ For Remote Sense / Local Sense, please refer to "Voltage Drop Compensation" section.

OUTPUT CURRENT (%)

EXTERNAL VOLTAGE (VDC)

I/P: 230 VAC
O/P: TESTING
Ta: 25°C

ADJ V	<0.4V	1V	4.7V	5V
SPEC	110%±5%	20%±5%	100%±5%	100%±5%
TEST	110%	19.7%	100.89%	102.6%

COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	
1	PWM Transistor (D to S) or (C to E) Peak Voltage	Q1 Rated 52A/600V Q3 Rated 52A/600V	I/P:High-Line +3V =(267V) AC ON/OFF 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. PV=1V (8)80% LOAD(53.6A) (9)50% LOAD(33.5A) (10)10% LOAD(6.7A) Ta:25°C	Q1: 267VAC: (1)481V (2)469V (3)432V (4)428V (5)428V (6)444V (7)469V (8)485V (9)485V (10)473V	Q3: 267VAC: (1)504V (2)488V (3)504V (4)504V (5)504V (6)508V (7)488V (8)496V (9)496V (10)484V
2	P.F.C Transistor (D to S) or (C to E) Peak Voltage	Q 900 Rated 52A/600V Q 902 Rated 52A/600V	I/P:High-Line +3V = (267V) AC ON/OFF 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. Ta:25°C	Q 900 267VAC:: (1)509V (2)436V (3)440V (4)440V (5)448V (6)440V (7)440V	Q 902 267VAC: (1)439V (2)448V (3)493V (4)493V (5)493V (6)485V (7)473V
3	P.F.C DIODE	D8 Rated : 16A/600V	I/P:High-Line +3V = (267V) 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) 452V (2) 444V (3) 448V (4) 444V	
4	Diode Peak Voltage	Q101 Rated 87A/150V Q104 Rated 87A/150V	I/P:High-Line +3V = 267V AC ON/OFF 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/	Q101: VDS: (1)116.2V (2)31V (3)107.4V (4)107.4V (5)106.6V (6)106.6V (7)122.6V (8)108.2V	Q104: VDS: (1)114.6V (2)22.2V (3)109V (4)109V (5)114.6V (6)109V (7)119.7V (8)109.8V (9)109V

		Q107 Rated 87A/150V Q110 Rated 87A/150V	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°C	(9)108.2V Q107: VDS: (1)119.4V (2)26.2V (3)108.2V (4)108.2V (5)108.2V (6)109V (7)125.9V (8)108.2V (9)109V Q110: VDS: (1)117.8V (2)23V (3)110.6V (4)110.6V (5)110.6V (6)110.6V (7)113.8V (8)110.6V (9)110.6V
5	Input Capacitor Voltage	C5 Rated: : 330μ/ 450V 105°C	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°C	(1)436V (2)428V (3)440V (4)432V
6	Control IC Voltage Test	PWM IC U201 Rated 3V~18V PFC IC U900 Rated 4.5V~20V	I/P:High-Line +3V = (267V) AC ON/OFF 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	U201 U900 (1) 13.72V (1) 11.95V (2) 13.48V (2) 11.71V (3) 12.92V (3) 11.71V (4) 13V (4)11.63V (5) 10.83V (5) 11.15V
7	TOP SWITCHING STAND BY POWER	U 71 Rated 20A/800V	I/P:High-Line +3V = (267V) AC ON/OFF O/P: (1)Full Load (2)Remote On/Off Ta:25°C	(1) 589V (2) 585V

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:1.5KVAC/min	I/P-O/P: 3.6 KVAC/min I/P-FG: 2.4 KVAC/min O/P-FG:1.8 KVAC/min Ta:25°C	I/P-O/P: 11.88 mA I/P-FG: 10.63 mA O/P-FG:13.3 mA 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°C	I/P-O/P: 22.6 GΩ I/P-FG: 20 GΩ O/P-FG: 10GΩ NO DAMAGE
3	GROUNDING CONTINUITY	FG(PE) TO CHASSIS OR TRACE < 100 mΩ	40A / 2min Ta:25°C	25mΩ

E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	HARMONIC	EN61000-3-2 CLASS A	I/P:230VAC/50HZ O/P:100% LOAD Ta:25°C	PASS

2	CONDUCTION	EN55022 CLASS B	I/P : 230 VAC (50HZ) O/P : FULL/50% LOAD Ta : 25°C	PASS Test by certified Lab
3	RADIATION	EN55022 CLASS A	I/P : 230 VAC (50HZ) O/P : FULL LOAD Ta : 25°C	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°C	CRITERIA A
5	E.F.T	EN61000-4-4 INDUSTRY INPUT : 2KV	I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C	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°C	CRITERIA A
7	Test by certified Lab & Test Report Prepare			

■ RELIABILITY TEST

ENVIRONMENT TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	TEMPERATURE RISE TEST	MODEL : DPU-3200-48 1. ROOM AMBIENT BURN-IN : 1 HRS I/P : 230VAC O/P : FULL LOAD 2. HIGH AMBIENT BURN-IN : 1 HRS I/P : 230VAC O/P : FULL LOAD		

		NO	Position	ROOM AMBIENT Ta= 25°C	HIGH AMBIENT Ta= 50°C
		1	BD1	69.4°C	94.1°C
		2	RY1	39.2°C	63.7°C
		3	D7	68.2°C	93.1°C
		4	D8	66.8°C	91.7°C
		5	T3	43.1°C	68.0°C
		6	U900	44.6°C	70.8°C
		7	Q900	60.2°C	86.1°C
		8	Q902	64.6°C	91.2°C
		9	C5	42.5°C	67.1°C
		10	U902	38.3°C	63.5°C
		11	Q1	63.0°C	90.2°C
		12	Q3	57.5°C	84.1°C
		13	T1-2	67.3°C	93.9°C
		14	T1-1	70.2°C	96.0°C
		15	T2-2	68.8°C	95.6°C
		16	T2-1	65.0°C	90.3°C
		17	T301	46.5°C	73.2°C
		18	U71	74.6°C	103.0°C
		19	U201	48.9°C	74.5°C
		20	C111	27.0°C	50.0°C
		21	C121	33.4°C	57.9°C
		22	C115	28.8°C	52.8°C
		23	C116	27.7°C	51.7°C
		24	Q401	34.8°C	59.7°C
		25	Q411	33.6°C	58.5°C
		26	Q101	44.5°C	69.1°C
		27	Q108	49.9°C	74.5°C
		28	U110	36.1°C	60.1°C
		29	RT90	60.3°C	86.2°C
		30	U903	46.1°C	73.2°C
		31	U501	33.9°C	58.0°C
		32	RG76	47.4°C	71.4°C
		33	L1	46.3°C	70.4°C
		34	L3	75.3°C	99.5°C
		35	R900	45.6°C	71.2°C
		36	ZR2	32.1°C	56.8°C
		37	LF1	36.2°C	62.2°C
		38	C2	30.7°C	55.3°C
		39	C10	29.4°C	54.1°C
		40	ZR1	26.9°C	51.9°C
		41	RT1	27.8°C	52.0°C
2	OVER LOAD BURN-IN TEST	NO DAMAGE 1 HOUR (MIN)		I/P : 230 VAC O/P : 110 % LOAD Ta : 25°C	TEST : OK
3	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 2 HOUR		I/P : 230VAC/180VAC O/P : 100 % LOAD Ta= -30°C/-25°C	TEST : OK

4	HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST	AFTER 12 HOURS IN CHAMBER ON CONTROL 50 °C NO DAMAGE	I/P : 272 VAC O/P : FULL LOAD Ta= 50°C HUMIDITY= 95 %R.H	TEST : OK
5	TEMPERATURE COEFFICIENT	± 0.03 %/°C(0~50°C)	I/P : 230 VAC O/P : FULL LOAD	± 0 %/°C(0~50°C)
6	STORAGE TEMPERATURE TEST	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		OK
7	THERMAL SHOCK TEST	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		OK
8	VIBRATION TEST	1 Carton & 1 Set (1) Waveform : Sine Wave (2) Frequency : 10~500Hz (3) Sweep Time : 12min/sweep cycle (4) Acceleration : 2G (5) Test Time : 60min in each axis (X.Y.Z) (6) Ta : 25°C		TEST : OK
9	CAPACITOR LIFE CYCLE	SUPPOSE C121 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) 1291380HRS (2) 205703HRS (3) 346894HRS (4) 479160HRS
10	MTBF	Conducted by Parts Stress Analysis Prediction 168K hrs min. Telcordia SR-332 (Bellcore) ; 44.9K hrs min. MIL-HDBK-217F (25°C)		
11	DMTBF/Accelerated Life Test	Demonstration Mean Time Between Failure (Expected Life): Above 50,000 hours @ TA 50°C		

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