Test Report: RST-10000-24

10000W Single Output 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

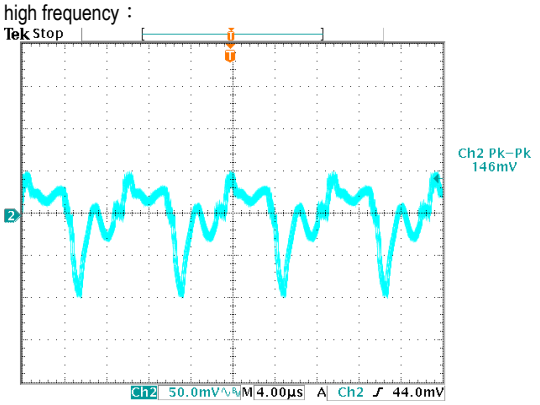
ENVIRONMENT TEST

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OUTPUT VOLTAGE ADJUST RANGE	CH1:23.5V~28.8 V	I/P:230VAC(△) I/P:400VAC(Y) O/P:MIN. LOAD Ta:25℃	22.43V~30.14V/230VAC(△) 22.44V~30.14V/400VAC(Y)
2	OUTPUT VOLTAGE TOLERANCE	V1: -1%~ 1 % (Max)	I/P: 196VAC /305VAC(△) I/P:340VAC /520VAC(Y) O/P:FULL LOAD/ MIN. LOAD Ta:25℃	V1:0%~-0.25%(△) V1: 0%~-0.33%(Y)
3	LINE REGULATION	V1: -0.5%~ 0.5 % (Max)	I/P: 196VAC~ 305VAC(△) I/P: 340VAC~ 520VAC(Y) O/P:FULL LOAD/ MIN. LOAD Ta:25℃	V1: 0%~0%(△) V1: 0%~0.04 %(Y)
4	LOAD REGULATION	V1: -0.5%~ 0.5% (Max)	I/P: 230VAC(△) I/P:400VAC(Y) O/P:FULL ~MIN LOAD Ta:25℃	V1:0%~-0.25%(△) V1:-0.08 %~0.25%(Y)
5	RIPPLE & NOISE	V1: 150mVp-p (Max)	I/P:230VAC(△) I/P:400VAC(Y) O/P:FULL LOAD Ta:25℃	V1:146 mVp-p(Max)(△) V1:146mVp-p (Max)(Y)

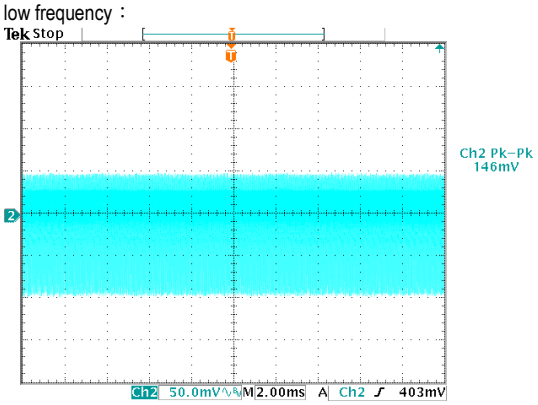
INPUT=400VAC @ FULL LOAD

high frequency：



INPUT=400VAC @ FULL LOAD

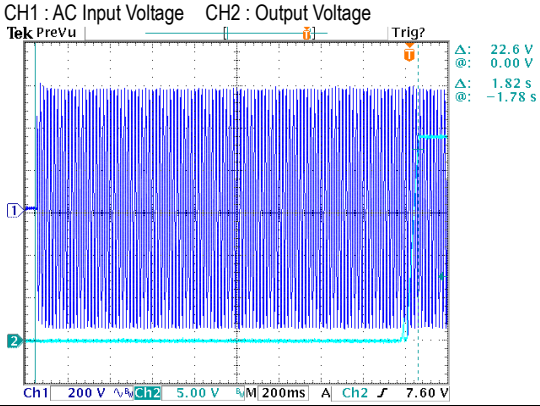
low frequency：



NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
6	SET UP TIME	230VAC/ 2200ms (Max) 400VAC/ 2200ms (Max)	I/P: 230VAC(△) I/P:400VAC(Y) O/P:FULL LOAD Ta:25℃	230VAC(△)/1810ms 400VAC (Y) /1820ms

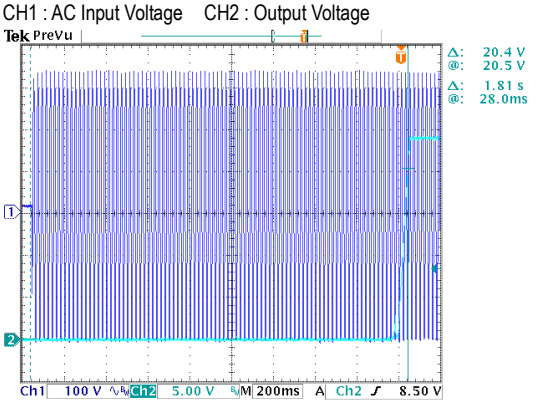
INPUT=400VAC @ FULL LOAD

CH1 : AC Input Voltage CH2 : Output Voltage



INPUT=230VAC @ FULL LOAD

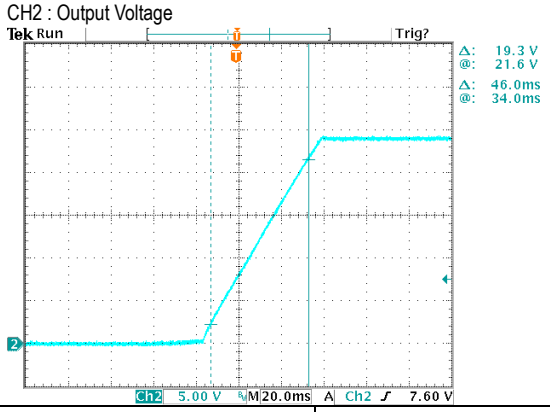
CH1 : AC Input Voltage CH2 : Output Voltage



7	RISE TIME	230VAC/ 80ms (Max) 400VAC/ 80ms (Max)	I/P: 230VAC(△) I/P:400VAC(Y) O/P:FULL LOAD Ta:25℃	230VAC(△)/49.2ms 400VAC (Y) /46ms

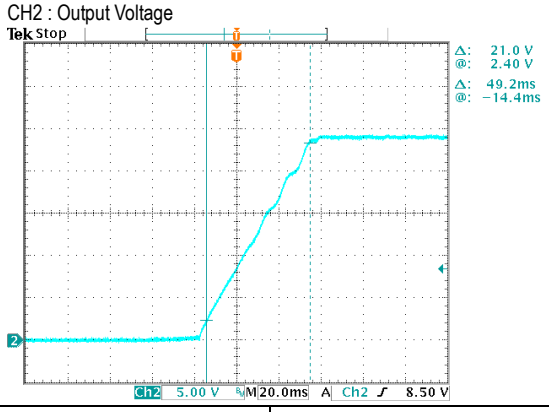
INPUT=400VAC @ FULL LOAD

CH2 : Output Voltage



INPUT=230VAC @ FULL LOAD

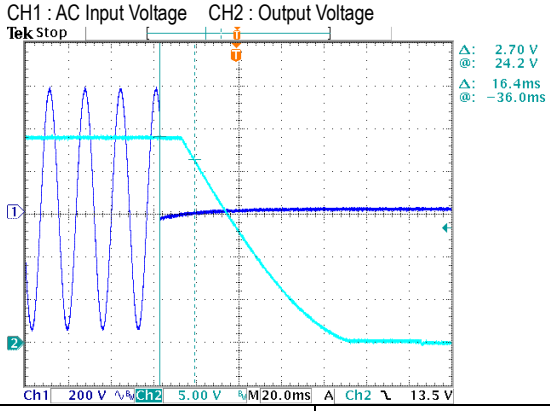
CH2 : Output Voltage



8	HOLD UP TIME	230VAC/ 20ms at 75%Load(Typ) 230VAC/ 14ms (Typ)	I/P: 230VAC(△) I/P:230VAC(△) O/P:FULL LOAD Ta:25℃	230VAC(△)/27.6ms75%load 230VAC (△) /16.8ms100%load

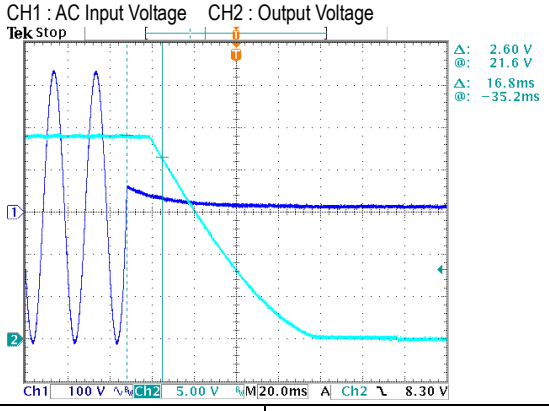
INPUT=400VAC @ FULL LOAD

CH1 : AC Input Voltage CH2 : Output Voltage



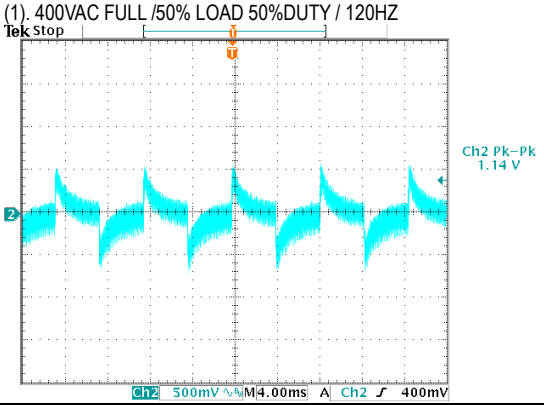
INPUT=230VAC @ FULL LOAD

CH1 : AC Input Voltage CH2 : Output Voltage

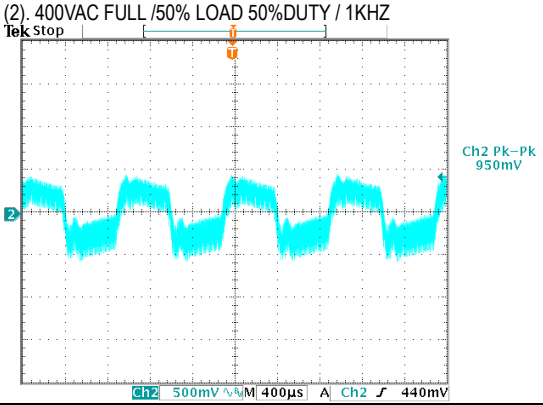


9	OVER/UNDERSHOOT TEST	< ±5%	I/P: 230VAC(△) I/P:400VAC(Y) O/P:FULL LOAD Ta:25℃	<3.75%/230VAC(△) < 3.33%/400VAC(Y)
10	DYNAMIC LOAD	V1:2400 mVp-p	I/P: 400VAC(Y) /230VAC(△) O/P: (1)FULL /50% LOAD 50%DUTY / 120HZ (2)FULL /50% LOAD 50%DUTY / 1KHZ	(1) 1140 mVp-p @400VAC 1120 mVp-p @230VAC (2) 950 mVp-p @400VAC 950 mVp-p @230VAC

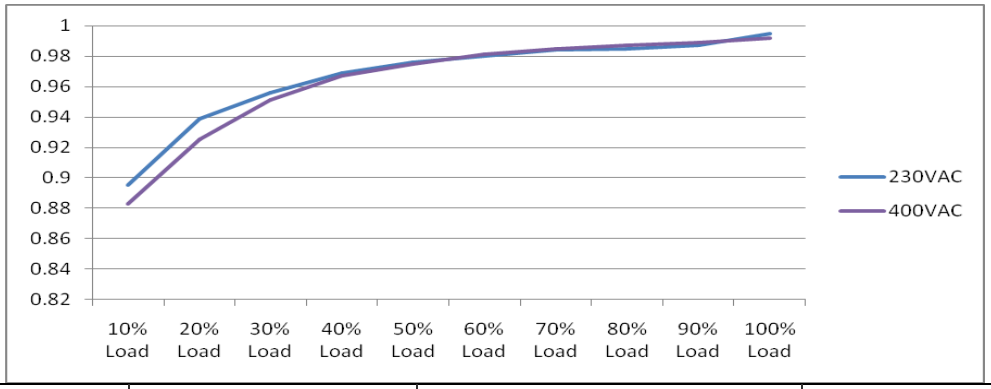
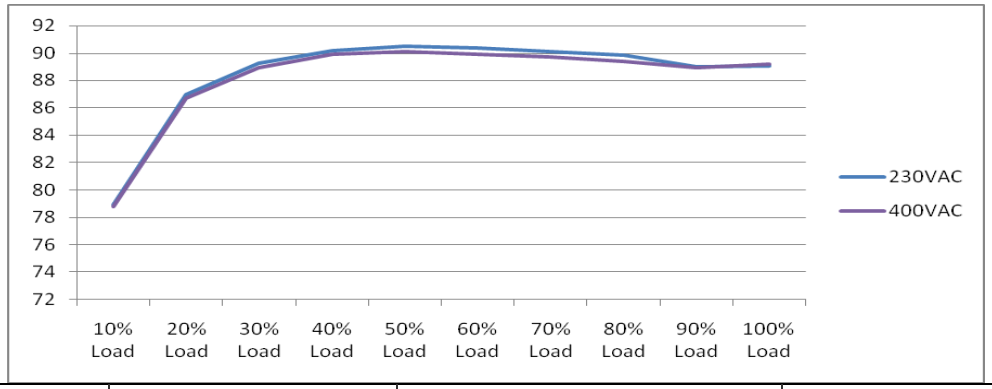
(1). 400VAC FULL /50% LOAD 50%DUTY / 120HZ

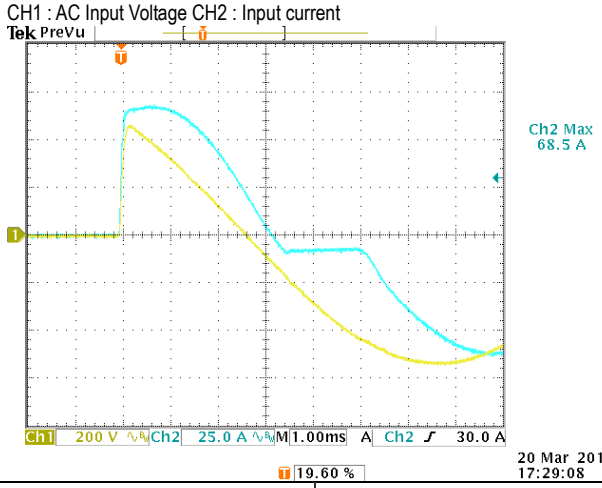
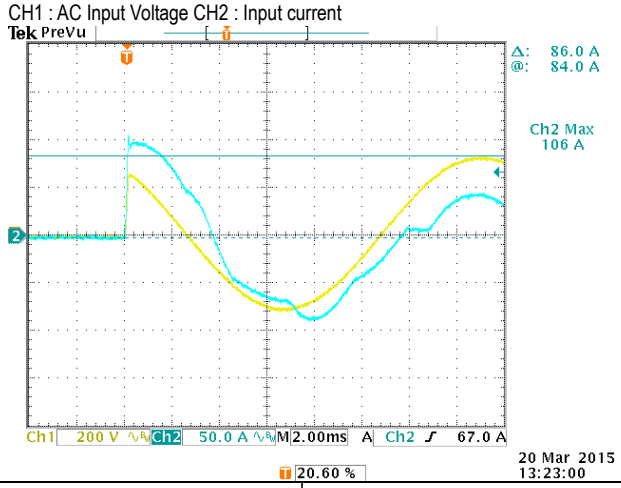


(2). 400VAC FULL /50% LOAD 50%DUTY / 1KHZ



INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	INPUT VOLTAGE RANGE	3Phase 3 Wire 196VAC~305VAC 3Phase 4 Wire 340VAC~530VAC	I/P:TESTING O/P: FULL LOAD Ta:25℃	192.9V~ 305 V(△) 333.59V~520V(Y)
			I/P: (1)LOW-LINE-3V=193(△) / 337V(Y) HIGH-LINE+5V=305(△) /535V(Y) O/P:FULL/MIN LOAD ON: 30 Sec OFF: 30 Sec 10MIN (2)230(△)/400Vac(Y) ON: 0.5 Sec OFF: 0.5 Sec 20MIN (3)230(△)/400Vac(Y) ON:3Sec OFF:3Sec 12HOURS (AC POWER ON/OFF NO DAMAGE)	TEST:OK
2	INPUT FREQUENCY RANGE	47HZ ~63 HZ NO DAMAGE	I/P:196 VAC ~305 VAC(△)/340~530VAC(Y) O/P: FULL~MIN LOAD Ta:25℃	TEST:OK
3	POWER FACTOR(TYP)	0.95 / 230VAC(△) 0.95 /400VAC(Y)	I/P: 230 VAC(△) I/P:400VAC(Y) O/P:FULL LOAD Ta:25℃	PF=0.985/230VAC(△) PF= 0.99/400VAC(Y)
	P.F vs LOAD 			
4	EFFICIENCY (TYP)	89%	I/P:230 VAC(△) I/P:400VAC(Y) O/P:FULL LOAD Ta:25℃	89.21%/230VAC (△) 89.17%/400VAC(Y)
	EFFICIENCY vs LOAD 			
5	INPUT CURRENT (Typ)	230V (3Φ △)/ 30A 400V(3Φ Y)/ 18A	I/P: 230 VAC(△) I/P:400VAC(Y)	I =28.43 A/ 230VAC(△) I = 15.41A/ 400VAC(Y)

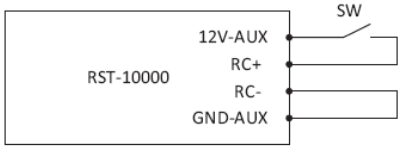
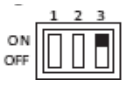
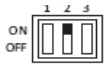
			O/P:FULL LOAD Ta:25℃	
6	INRUSH CURRENT(Typ)	230V/150 A 400V/100 A COLD START	I/P:230VAC(△) I/P:400VAC (Y) O/P:FULL LOAD Ta:25℃	I =106A/230 VAC (△) I =68.5A/ 400VAC (Y)
	INPUT=400VAC @ FULL LOAD CH1 : AC Input Voltage CH2 : Input current 		INPUT=230VAC @ FULL LOAD CH1 : AC Input Voltage CH2 : Input current 	
7	LEAKAGE CURRENT	<7mA /305V (△)	I/P:305VAC(△) O/P:NO LOAD Ta:25℃	R-FG:2.6mA S-FG:2.6mA T-FG:2.6mA R,S,T, -V(+):2mA R,S,T-V(-):2mA

PROTECTION FUNCTION TEST

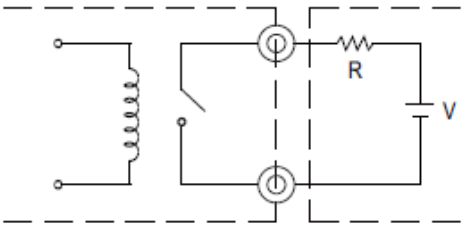
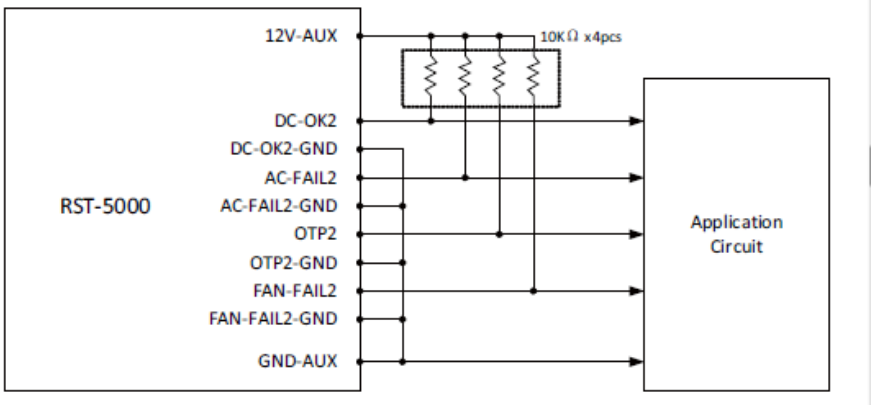
NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OVER LOAD PROTECTION	100%~112%	I/P: 230VAC(△) I/P:400VAC(Y) O/P:TESTING Ta:25℃	104.9%/230VAC(△) 104.8%/400VAC(Y) User adjustable continuous constant current limiting or constant current limiting with delay shutdown after 5 seconds, re-power on to recover
2	OVER VOLTAGE PROTECTION	30V~33.6V	I/P: 230VAC/(△) I/P:400VAC(Y) O/P: MIN LOAD Ta:25℃	31.2V/ 230VAC(△) 31.2V/400VAC(Y) Shut down Re- power ON
3	OVER TEMPERATURE PROTECTION	Shut down o/p voltage，recovers automatically after temperature goes down	I/P: 230 VAC(△) I/P:400VAC(Y) O/P:FULL LOAD	Shut down o/p voltage，recovers automatically after temperature goes down
4	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P: 305VAC(△) I/P:520VAC(Y) O/P: FULL LOAD Ta:25℃	NO DAMAGE User adjustable continuous constant current limiting or constant current limiting with delay shutdown after 5 seconds, re-power on to recover

CONTROL FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	AUXILIARY POWER (AUX)	12V@0.1A Only for Remote ON/OFF	I/P: 230 VAC(△) I/P: 400VAC(Y)	230 VAC(△): 11.94V/0.1 A 400VAC(Y): 11.94/0.1VA

		Control	O/P:FULL LOAD Ta:25℃	
2	Remote ON/OFF Control	The PSU can be turned ON/OFF by using the "Remote ON/OFF" function. **Between ON/OFF(CN313 or CN314 pin10) and 12V-AUX(CN315 pin1)** / **Output Status** SW close (Short) / PSU ON SW open (Open) / PSU OFF  Fig 1.1 I/P: 230 VAC(△) I/P: 400VAC(Y) O/P:FULL LOAD Ta:25℃		
3	REMOTE SENSE	S+ / S- >0.3V	I/P: 400VAC(Y) O/P:FULL LOAD Ta:25℃	> 0.3 V
4	OUTPUT VOLTAGE PROGRAMMABLE	I/P: 400VAC(Y)  DIP SW3 ON CN313 PV+ Connect to external V+ CN313 PV- Connect to external V- EXT.DC(V) / Vo(%) / LOAD DC=1V±0.5% / 20%±3% / 0~100% DC=2V±0.5% / 40%±3% / 0~100% DC=3V±0.5% / 60%±3% / 0~100% DC=4V±0.5% / 80%±3% / 0~100% DC=5V±0.5% / 100%±3% / 0~100% DC=6V±0.5% / 120%±3% / 0~80%	EXT.DC(V) / Vo(%) / LOAD DC=1V / 20.37~20.3 / 0~100% DC=2V / 40.12~40.25 / 0~100% DC=3V / 60.29~60.20 / 0~100% DC=4V / 79.5~79.41 / 0~100% DC=5V / 100.5~100.4 / 0~100% DC=6V / 119.2~118.5 / 0~80%
5	OUTPUT CURRENT PROGRAMMABLE	I/P: 400VAC(Y)  DIP SW2 ON CN313 PC+ Connect to external V+ CN313 PC- Connect to external V- EXT.DC(V) / Io_limit (%) / LOAD DC=1V±0.5% / 20%±10% / 0~100% DC=2V±0.5% / 40%±10% / 0~100% DC=3V±0.5% / 60%±10% / 0~100% DC=4V±0.5% / 80%±10% / 0~100% DC=5V±0.5% / 100%±10% / 0~100%	EXT.DC(V) / Io_ limit (%) / LOAD DC=1V / 21.5 / 0~100% DC=2V / 40.45 / 0~100% DC=3V / 60.75 / 0~100% DC=4V / 80.57 / 0~100% DC=5V / 100.75 / 0~100%
6	Select OLP mode	SW301 / PROTECTION SW301 PIN1 ON / Constant current delay 5sec Vo shutdown repower on SW301 PIN1 OFF / Constant current		
7	Front Panel Indicators	LED / Description GREEN(LED1) / LED on when output voltage is OK RED(LED2) / LED on when any protection occurs		

<table>
<tr><td>8</td><td>FAN LOCK TEST</td><td colspan="2">I/P: 400VAC(Y)
O/P:FULL LOAD
Ta:25℃</td><td>Shut down Re-power ON</td></tr>
<tr><td>9</td><td>AC- FAIL</td><td colspan="2">I/P: 400VAC(Y)
O/P:NO LOAD
<table><tr><th>Test condition</th><th>Input Voltage</th><th>STATE</th></tr><tr><td>Low Line</td><td>316±7Vac(Y)</td><td>AC Fail</td></tr><tr><td>Low Line recovery</td><td>332±5Vac(Y)</td><td>OK</td></tr></table>Ta:25℃</td><td><table><tr><th>Test condition</th><th>Input Voltage</th><th>STATE</th></tr><tr><td>Low Line</td><td>316.09</td><td>AC Fail</td></tr><tr><td>Low Line recovery</td><td>335.15</td><td>OK</td></tr></table></td></tr>
<tr><td>10</td><td>CURRENT SHARING</td><td>PSU1-PSU2 < 10%</td><td>I/P: 400VAC(Y)
O/P：90%/50% LOAD
Ta：25℃</td><td>O/P：100%
PSU1：408 A
PSU2：393 A

O/P：50%
PSU1：205.8 A
PSU2：195.4 A</td></tr>
<tr><td>11</td><td>Alarm Signal Output</td><td colspan="3">There are 4 alarm signals on CN315, and each signal can select two types of output circuit.
(1)Relay contact output
Normally open contact. "Short" when the alarm arises. Relay contact rating(maximum) is 30V/1A resistive.
 
(2)Open collector output
Normally open contact. "Short" when the alarm arises. Relay contact rating(maximum) is 30V/1A resistive.
An external voltage source is required for this function that is shown in Fig 7.2. These signals are isolated from output. The maximum sink current is
10mA and the maximum external voltage is 20V (there is a built-in 24V zener diode in inner circuitry).
 
TEST CONDITION：
I/P: 400VAC(Y)
O/P:FULL LOAD
Ta:25℃

RESULT:
<table><tr><td>Function</td><td>Description</td></tr></table></td></tr>
</table>

		DC- OK 1: AC-FAIL 1 FAN -FAIL 1 OTP 1	Alarm signal of AC-fail. Normally open contact. "Short" when the PSU input voltage is too low. Relay contact rating(maximum) is 30V/1A resistive.	
		DC- OK 2: AC-FAIL 2 FAN -FAIL 2 OTP 2	Alarm signal of AC fail. Open collector signal. Low when the PSU input voltage is too low. The maximum sink current is 10mA and the maximum external voltage is 20V.	

COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	PWM Transistor (D to S) or (C to E) Peak Voltage	Q124 Rated 36 A/500V	I/P:High-Line =533V(Y) O/P: (1)Full Load input on/off (2)Output Short (3)Dynamic Load Full Load/ Min. Load 90%Duty/1KHz Ta:25℃	 (1)444V (2)442V (3)448V
2	Diode Peak Voltage	D452 Rated 300 A/100V	I/P:High-Line =533 V (Y) O/P: (1)Full Load input on/off (2)Output Short (3)Dynamic Load Full Load/ Min. Load 90%Duty/1KHz Ta:25℃	 (1)84.4V (2)78V (3)82.4V
3	Input Capacitor Voltage	C2 Rated: 470μ/450 V SURGE VOLTAGE:500V	I/P:High-Line =533V(Y) O/P: (1)Full Load input on/off (2) Min load input on /Off (3)Full Load /Min load Change Ta:25℃	(1)470V (2)472V (3)443V
4	Control IC Voltage Test	U302 Rated 9.8~18.5V	I/P:High-Line =533 V(Y) O/P(1)FULL LOAD (2) Output Short Ta:25℃	(1) 12.3V (2) 12.3V
5	P.F.C Transistor (D to S) or (C to E) Peak Voltage	Q2 Rated 47A/ 600V	I/P:High-Line =533 V (Y) O/P: (1)Full Load input on/off (2)Output Short (3)Dynamic Load Full Load/ Min. Load 90%Duty/1KHz Ta:25℃	 (1) 536 V (2) 438V (3) 488 V

■ SAFETY & E.M.C. TEST

SAFETY TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	WITHSTAND VOLTAGE	I/P-O/P： 3 KVAC/min I/P-FG： 2KVAC/min O/P-FG： 0.5 KVAC/min	I/P-O/P： 3.6 KVAC/min I/P-FG： 2.4KVAC/min O/P-FG： 0.6 KVAC/min Ta：25℃	I/P-O/P： 20.21 mA I/P-FG： 23.08 mA O/P-FG： 13.83 mA NO DAMAGE
2	ISOLATION RESISTANCE	I/P-O/P：500VDC>100MΩ I/P-FG： 500VDC>100MΩ	I/P-O/P： 500 VDC I/P-FG： 500 VDC	I/P-O/P： 956 MΩ I/P-FG： 3.75 GΩ

		O/P-FG：500VDC>100MΩ	O/P-FG： 500 VDC Ta：25℃/70%RH	O/P-FG： 6.46 GΩ NO DAMAGE
3	GROUNDING CONTINUITY	FG(PE) TO CHASSIS OR TRACE < 100 mΩ	40 A / 2min Ta：25℃ / 70%RH	6 mΩ

E.M.C TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	HARMONIC	EN61000-3-2 CLASS A	I/P: 400VAC(50HZ) (Y) O/P:100%,LOAD Ta:25℃	PASS
2	CONDUCTION	EN55022 CLASS A	I/P: 400VAC(50HZ) (Y) O/P:FULL/50% LOAD Ta:25℃	Test by certified Lab
3	RADIATION	EN55022 CLASS A	I/P: 400VAC(50HZ) (Y) O/P:FULL LOAD Ta:25℃	Test by certified Lab
4	E.S.D	EN61000-4-2 INDUSTRY AIR:8KV / Contact:4KV	I/P: 400VAC(50HZ) (Y) O/P:FULL LOAD Ta:25℃	CRITERIA A
5	E.F.T	EN61000-4-4 INDUSTRY INPUT: 2KV	I/P: 400VAC(50HZ) (Y) O/P:FULL LOAD Ta:25℃	CRITERIA A
6	SURGE	IEC61000-4-5 INDUSTRY L-N :2KV L,N-PE:4KV	I/P: 400VAC(50HZ) (Y) O/P:FULL LOAD Ta:25℃	CRITERIA A
7	Test by certified Lab & Test Report Prepare			

■ ELIABILITY TEST

ENVIRONMENT TEST

<table>
<tr><th>NO</th><th>TEST ITEM</th><th>SPECIFICATION</th><th>TEST CONDITION</th><th>RESULT</th></tr>
<tr><td>1</td><td>TEMPERATURE RISE TEST</td><td colspan="3">MODEL： RST-10000-24
1. ROOM AMBIENT BURN-IN：2 HRS
I/P： 400VAC(Y) O/P： FULL LOAD Ta= 38 ℃
2. HIGH AMBIENT BURN-IN： 2 HRS
I/P： 400VAC(Y) O/P： FULL LOAD Ta= 48 ℃
<table>
<tr><th>NO</th><th>Position</th><th>ROOM AMBIENT Ta= 38 ℃</th><th>HIGH AMBIENT Ta= 48 ℃</th></tr>
<tr><td>1</td><td>Q151</td><td>68.8℃</td><td>80.5℃</td></tr>
<tr><td>2</td><td>Q126</td><td>67.8℃</td><td>79.0℃</td></tr>
<tr><td>3</td><td>D3</td><td>75.5℃</td><td>85.6℃</td></tr>
<tr><td>4</td><td>D43</td><td>83.6℃</td><td>93.4℃</td></tr>
<tr><td>5</td><td>Q3</td><td>73.0℃</td><td>83.5℃</td></tr>
<tr><td>6</td><td>Q43</td><td>84.9℃</td><td>94.0℃</td></tr>
<tr><td>7</td><td>BD1</td><td>87.4℃</td><td>97.4℃</td></tr>
<tr><td>8</td><td>BD41</td><td>93.9℃</td><td>103.3℃</td></tr>
<tr><td>9</td><td>L1</td><td>58.2℃</td><td>68.6℃</td></tr>
<tr><td>10</td><td>C1</td><td>55.0℃</td><td>65.0℃</td></tr>
<tr><td>11</td><td>T123</td><td>57.8℃</td><td>66.5℃</td></tr>
<tr><td>12</td><td>L121</td><td>73.6℃</td><td>84.9℃</td></tr>
<tr><td>13</td><td>D452</td><td>106.4℃</td><td>115.2℃</td></tr>
<tr><td>14</td><td>NTC</td><td>57.4℃</td><td>67.8℃</td></tr>
<tr><td>15</td><td>T451</td><td>88.1℃</td><td>99.3℃</td></tr>
<tr><td>16</td><td>T452</td><td>92.2℃</td><td>102.1℃</td></tr>
<tr><td>17</td><td>T453</td><td>80.8℃</td><td>91.9℃</td></tr>
<tr><td>18</td><td>D456</td><td>58.4℃</td><td>68.9℃</td></tr>
<tr><td>19</td><td>L452</td><td>69.1℃</td><td>80.9℃</td></tr>
<tr><td>20</td><td>Q640</td><td>46.5℃</td><td>56.7℃</td></tr>
<tr><td>21</td><td>C647</td><td>43.2℃</td><td>61.2℃</td></tr>
<tr><td>22</td><td>C602</td><td>52.8℃</td><td>62.6℃</td></tr>
<tr><td>23</td><td>C621</td><td>54.6℃</td><td>64.9℃</td></tr>
<tr><td>24</td><td>RG603</td><td>57.4℃</td><td>79.2℃</td></tr>
<tr><td>25</td><td>D148</td><td>62.1℃</td><td>74.3℃</td></tr>
<tr><td>26</td><td>C122</td><td>56.4℃</td><td>66.8℃</td></tr>
<tr><td>27</td><td>C146</td><td>57.0℃</td><td>67.4℃</td></tr>
<tr><td>28</td><td>TSW1</td><td>75.2℃</td><td>85.1℃</td></tr>
<tr><td>29</td><td>C465</td><td>58.5℃</td><td>69.6℃</td></tr>
</table></td></tr>
<tr><td>2</td><td>OVER LOAD BURN-IN TEST</td><td>NO DAMAGE
1 HOUR (MIN)</td><td>I/P： 400VAC(Y)
O/P：104 % LOAD
Ta：25℃</td><td>TEST：OK</td></tr>
<tr><td>3</td><td>LOW TEMPERATURE
TURN ON TEST</td><td>TURN ON AFTER 2 HOUR</td><td>I/P： 230VAC/196VAC(△)
O/P： 100 % LOAD
Ta= -35 ℃</td><td>TEST：OK</td></tr>
<tr><td>4</td><td>HIGH HUMIDITY
HIGH TEMPERATURE
HIGH VOLTAGE
TURN ON TEST</td><td>AFTER 12 HOURS
IN CHAMBER ON
CONTROL 50 ℃
NO DAMAGE</td><td>I/P： 540VAC(△)
O/P：FULL LOAD
Ta= 50 ℃
HUMIDITY= 95 %R.H</td><td>TEST：OK</td></tr>
<tr><td>5</td><td>TEMPERATURE
COEFFICIENT</td><td>± 0.03 %(0~50℃)</td><td>I/P： 230 VAC(△)
O/P：FULL LOAD</td><td>± 0.022 %(0~50℃)</td></tr>
</table>

6	STORAGE TEMPERATURE TEST	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：5 CYCLE 5. Input/Output condition： STATIC	OK
7	THERMAL SHOCK TEST	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：10 CYCLE 5. Input/Output condition： 230VAC(△)/Full Load	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℃	TEST：OK
9	CAPACITOR LIFE CYCLE	SUPPOSE C453 IS THE MOST CRITICAL COMPONENT (1) I/P： 400VAC(Y) O/P：FULL LOAD Ta= 25 ℃ LIFE TIME (2) I/P： 400VAC(Y) O/P：FULL LOAD Ta= 50 ℃ LIFE TIME (3) I/P： 400VAC(Y) O/P：75% LOAD Ta= 50 ℃ LIFE TIME (4) I/P： 400VAC(Y) O/P：50% LOAD Ta= 50 ℃ LIFE TIME	(1) 1844214 HRS (2) 306284 HRS (3) 384999 HRS (4) 433136 HRS
10	MTBF	Conducted by Parts Stress Analysis Prediction 50K hrs min. Telcordia SR-332 (Bellcore) ; 17K hrs min. MIL-HDBK-217F (25℃)	
11	DMTBF/Accelerated Life Test	Demonstration Mean Time Between Failure (Expected Life): Above 50,000 hours @ TA 50℃	

SAMPLE	TESTER	REVIEW	APPROVAL
Product sample	DANIEL GAO	SANFORD SU	VINCENT ZENG

12.10.30 A50-F031