



# Test Report: RSP-320-7.5

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320W Single Output With PFC Function

## ■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection 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                                                       | VERDICT |
|----|--------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------|
| 1  | RIPPLE & NOISE                 | V1 : 150 mVp-p (Max)                            | I/P : 230VAC<br>O/P : FULL LOAD<br>Ta : 25°C                                                                                                                                                                    | V1 : 18 mVp-p (Max)                                          | P       |
| 2  | OUTPUT VOLTAGE<br>ADJUST RANGE | CH1 : 6V ~ 9V                                   | I/P : 230 VAC<br>I/P : 115 VAC<br>O/P : MIN LOAD<br>Ta : 25°C                                                                                                                                                   | 5.59 V ~ 9.58 V/ 230 VAC<br>5.59 V ~ 9.58 V/ 115 VAC         | P       |
| 3  | OUTPUT VOLTAGE<br>TOLERANCE    | V1 : 2 % ~ -2% (Max)                            | I/P : 100VAC / 264 VAC<br>O/P : FULL/ MIN LOAD<br>Ta : 25°C                                                                                                                                                     | V1 : 0.03 % ~ -0.03 %                                        | P       |
| 4  | LINE REGULATION                | V1 : 0.5% ~ -0.5 % (Max)                        | I/P : 100VAC ~ 264 VAC<br>O/P : FULL LOAD<br>Ta : 25°C                                                                                                                                                          | V1 : 0 % ~ 0 %                                               | P       |
| 5  | LOAD REGULATION                | V1 : 1 % ~ -1 % (Max)                           | I/P : 230 VAC<br>O/P : FULL ~ MIN LOAD<br>Ta : 25°C                                                                                                                                                             | V1 : 0.03 % ~ -0.03 %                                        | P       |
| 6  | SET UP TIME                    | 230VAC : 1500 ms (Max)<br>115VAC : 3000 ms(Max) | I/P : 230 VAC<br>I/P : 115 VAC<br>O/P : FULL LOAD<br>Ta : 25°C                                                                                                                                                  | 230VAC/ 402 ms<br>115VAC/ 850 ms                             | P       |
| 7  | RISE TIME                      | 230VAC : 50 ms (Max)<br>115VAC : 50 ms (Max)    | I/P : 230 VAC<br>I/P : 115 VAC<br>O/P : FULL LOAD<br>Ta : 25°C                                                                                                                                                  | 230VAC/ 8 ms<br>115VAC/ 8 ms                                 | P       |
| 8  | HOLD UP TIME                   | 230VAC : 8 ms (TYP)<br>115VAC : 8 ms (TYP)      | I/P : 230 VAC<br>I/P : 115 VAC<br>O/P : FULL LOAD<br>Ta : 25°C                                                                                                                                                  | 230VAC/ 23 ms<br>115VAC/ 17 ms                               | P       |
| 9  | OVER/UNDERSHOOT<br>TEST        | < ±5%                                           | I/P : 230 VAC<br>O/P : FULL LOAD<br>Ta : 25°C                                                                                                                                                                   | TEST : <5 %                                                  | P       |
| 10 | DYNAMIC LOAD                   | V1 : 1500 mVp-p                                 | I/P : 230 VAC<br>(1).O/P : FULL /Min LOAD 90%DUTY/<br>1KHZ<br>(2).O/P : FULL /Min LOAD 90%DUTY/<br>3KHZ<br>(3).O/P : FULL /Min LOAD 90%DUTY/<br>5KHZ<br>(4).O/P : FULL /Min LOAD 50%DUTY/<br>120HZ<br>Ta : 25°C | (1)736 mVp-p<br>(2)710 mVp-p<br>(3)476 mVp-p<br>(4)728 mVp-p | P       |

## INPUT FUNCTION TEST

| NO | TEST ITEM             | SPECIFICATION                                      | TEST CONDITION                                                                                                                                | RESULT                                     | VERDICT |
|----|-----------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------|
| 1  | INPUT VOLTAGE RANGE   | 88VAC~264 VAC                                      | I/P : TESTING<br>O/P : FULL LOAD<br>Ta : 25°C                                                                                                 | 69 V~264V                                  | P       |
|    |                       |                                                    | I/P :<br>LOW-LINE-3V= 97 V<br>HIGH-LINE+15%=300 V<br>O/P : FULL/MIN LOAD<br>ON : 30 Sec . OFF : 30 Sec 10MIN<br>( AC POWER ON/OFF NO DAMAGE ) | TEST : OK                                  |         |
| 2  | INPUT FREQUENCY RANGE | 47HZ ~63 HZ<br>NO DAMAGE OSC                       | I/P : 88 VAC ~ 264 VAC<br>O/P : FULL~MIN LOAD<br>Ta : 25°C                                                                                    | TEST : OK                                  | P       |
| 3  | POWER FACTOR          | 0.95 / 230 VAC(TYP)<br>0.98 / 115 VAC(TYP)         | I/P : 230 VAC<br>I/P : 115 VAC<br>O/P : FULL LOAD<br>Ta : 25°C                                                                                | PF= 0.981 / 230 VAC<br>PF= 0.998 / 115 VAC | P       |
| 4  | EFFICIENCY            | 88 % (TYP)                                         | I/P : 230 VAC<br>O/P : FULL LOAD<br>Ta : 25°C                                                                                                 | 89.3 %                                     | P       |
| 5  | INPUT CURRENT         | 230V/ 2 A (TYP)<br>115V/ 4 A (TYP)                 | I/P : 230 VAC<br>I/P : 115 VAC<br>O/P : FULL LOAD<br>Ta : 25°C                                                                                | I = 1.5 A/ 230 VAC<br>I = 3.23 A/ 115 VAC  | P       |
| 6  | INRUSH CURRENT        | 230V/ 40 A (TYP)<br>115V/ 20 A (TYP)<br>COLD START | I/P : 230 VAC<br>I/P : 115 VAC<br>O/P : FULL LOAD<br>Ta : 25°C                                                                                | I = 30 A/ 230 VAC<br>I = 15 A/ 115 VAC     | P       |
| 7  | LEAKAGE CURRENT       | < 1 mA / 240 VAC                                   | I/P : 264 VAC<br>O/P : Min LOAD<br>Ta : 25°C                                                                                                  | L-FG : 0.74 mA<br>N-FG : 0.74 mA           | P       |

## PROTECTION FUNCTION TEST

| NO | TEST ITEM                   | SPECIFICATION                                 | TEST CONDITION                                                | RESULT                                                                                            | VERDICT |
|----|-----------------------------|-----------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------|
| 1  | OVER LOAD PROTECTION        | 105 % ~ 135 %                                 | I/P : 230 VAC<br>I/P : 115 VAC<br>O/P : TESTING<br>Ta : 25°C  | 120.8 %/ 230 VAC<br>120.8 %/ 115 VAC<br>Hiccup Mode                                               | P       |
| 2  | OVER VOLTAGE PROTECTION     | CH1 : 9.4V ~ 10.9V                            | I/P : 230 VAC<br>I/P : 115 VAC<br>O/P : MIN LOAD<br>Ta : 25°C | 10.4 V/ 230 VAC<br>10.4V/ 115 VAC<br>Shut down Re- power ON                                       | P       |
| 3  | OVER TEMPERATURE PROTECTION | SPEC :<br>TSW1 : 80 ± 5°C O.T.P.<br>NO DAMAGE | I/P : 230 VAC<br>O/P : FULL LOAD                              | O.T.P. Active<br>Shut down o/p voltage , recovers<br>automatically after temperature<br>goes down | P       |
| 4  | SHORT PROTECTION            | SHORT EVERY OUTPUT<br>1 HOUR NO DAMAGE        | I/P : 264 VAC<br>O/P : FULL LOAD<br>Ta : 25°C                 | NO DAMAGE<br>Hiccup Mode                                                                          | P       |

## COMPONENT STRESS TEST

| NO | TEST ITEM                                              | SPECIFICATION                                                              | TEST CONDITION                                                                                                                                                                             | RESULT                                                                             | VERDICT |
|----|--------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------|
| 1  | Power Transistor<br>( D to S) or (C to E) Peak Voltage | Q3 Rated :<br>STP14NM50N 12A/500V                                          | I/P : High-Line +3V = 267 V<br>O/P : (1)Full Load Turn on<br>(2) Output Short<br>(3)Full load continue<br>Ta : 25°C                                                                        | (1) 434 V<br>(2) 438 V<br>(3) 428 V                                                | P       |
| 2  | Diode Peak Voltage                                     | Q102 Rated :<br>AP9963GP 160A/40V<br><br>Q104 Rated :<br>AP9963GP 160A/40V | I/P : High-Line +3V = 267 V<br>O/P : (1)Full Load Turn on<br>(2)Output Short<br>(3)Full load continue<br><br>(1)Full Load Turn on<br>(2)Output Short<br>(3)Full load continue<br>Ta : 25°C | (1) 35.4 V<br>(2) 35 V<br>(3) 34.8 V<br><br>(1) 29.6 V<br>(2) 29.8 V<br>(3) 28.6 V | P       |
| 3  | Input Capacitor Voltage                                | C 5 Rated :<br>180u/400V 105°C 18*40 KMG<br>(SURGE VOLTAGE 450V)           | I/P : High-Line +3V = 267 V<br>O/P : (1)Full Load Turn on /Off<br>(2) Min load Turn on /Off<br>(3)Full Load /Min load<br>Change<br>Ta : 25°C                                               | (1) 384 V<br>(2) 380 V<br>(3) 410 V                                                | P       |
| 4  | Control IC Voltage Test                                | U 1 Rated :<br>PWM FAN4800AUN<br>12V~30V                                   | I/P : High-Line +3V = 267 V<br>O/P : (1)Full Load Turn on /Off<br>(2) Min load Turn on /Off<br>(3)Full Load /Min load<br>Change<br>Ta : 25°C                                               | (1) 15.4 V<br>(2) 15.2 V<br>(3) 15.4 V                                             | P       |
| 5  | Power Transistor<br>( D to S) or (C to E) Peak Voltage | Q 2 Rated :<br>STP19NM50N 13A/500V                                         | I/P : High-Line +3V = 267 V<br>O/P : (1)Full Load Turn on<br>(2) Output Short<br>(3)Full load continue<br>Ta : 25°C                                                                        | (1) 408 V<br>(2) 420 V<br>(3) 404 V                                                | P       |

## SAFETY & E.M.C. TEST

### SAFETY TEST

| NO | TEST ITEM            | SPECIFICATION                                                            | TEST CONDITION                                                                        | RESULT                                                                 | VERDICT |
|----|----------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------|
| 1  | WITHSTAND VOLTAGE    | I/P-O/P : 3 KVAC/min<br>I/P-FG : 2 KVAC/min<br>O/P-FG : 0.5 KVAC/min     | I/P-O/P : 3.6 KVAC/min<br>I/P-FG : 2.4 KVAC/min<br>O/P-FG : 0.6 KVAC/min<br>Ta : 25°C | I/P-O/P : 5.80 mA<br>I/P-FG : 5.12 mA<br>O/P-FG : 8.58 mA<br>NO DAMAGE | P       |
| 2  | ISOLATION RESISTANCE | I/P-O/P : 500VDC>100MΩ<br>I/P-FG : 500VDC>100MΩ<br>O/P-FG : 500VDC>100MΩ | I/P-O/P : 500 VDC<br>I/P-FG : 500 VDC<br>O/P-FG : 500 VDC<br>Ta : 25°C/70% RH         | I/P-O/P : 30 GΩ<br>I/P-FG : 29 GΩ<br>O/P-FG : 4.02 GΩ<br>NO DAMAGE     | P       |
| 3  | GROUNDING CONTINUITY | FG(PE) TO CHASSIS<br>OR TRACE < 100 mΩ                                   | 40 A / 2min<br>Ta : 25°C / 70%RH                                                      | 2 mΩ                                                                   | P       |

### E.M.C TEST

| NO | TEST ITEM                                   | SPECIFICATION                                               | TEST CONDITION                                           | RESULT                        | VERDICT |
|----|---------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------|-------------------------------|---------|
| 1  | HARMONIC                                    | EN61000-3-2<br>CLASS A<br>CLASS D                           | I/P : 230 VAC/50HZ<br>O/P : FULL LOAD<br>Ta : 25°C       | PASS                          | P       |
| 2  | CONDUCTION                                  | EN55022<br>CLASS B                                          | I/P : 230 VAC (50HZ)<br>O/P : FULL/50% LOAD<br>Ta : 25°C | PASS<br>Test by certified Lab | P       |
| 3  | RADIATION                                   | EN55022<br>CLASS B                                          | I/P : 230 VAC (50HZ)<br>O/P : FULL LOAD<br>Ta : 25°C     | PASS<br>Test by certified Lab | P       |
| 4  | E.S.D                                       | EN61000-4-2<br>LIGHT INDUSTRY<br>AIR : 8KV / Contact : 4KV  | I/P : 230 VAC/50HZ<br>O/P : FULL LOAD<br>Ta : 25°C       | CRITERIA A                    | P       |
| 5  | E.F.T                                       | EN61000-4-4<br>LIGHT INDUSTRY<br>INPUT : 1KV                | I/P : 230 VAC/50HZ<br>O/P : FULL LOAD<br>Ta : 25°C       | CRITERIA A                    | P       |
| 6  | SURGE                                       | IEC61000-4-5<br>LIGHT INDUSTRY<br>L-N : 1KV<br>L,N-PE : 2KV | I/P : 230 VAC/50HZ<br>O/P : FULL LOAD<br>Ta : 25°C       | CRITERIA A                    | P       |
| 7  | Test by certified Lab & Test Report Prepare |                                                             |                                                          |                               |         |

## RELIABILITY TEST

### ENVIRONMENT TEST

| NO | TEST ITEM                                                         | SPECIFICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | TEST CONDITION                                                     | RESULT                     | VERDICT |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
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| 1  | TEMPERATURE RISE TEST                                             | <div>MODEL : RSP-320-5</div> <div>1. ROOM AMBIENT BURN-IN : 15 HRS</div> <div>I/P : 230VAC O/P : FULL LOAD Ta=31.9 °C</div> <div>2. HIGH AMBIENT BURN-IN : 7 HRS</div> <div>I/P : 230VAC O/P : FULL LOAD Ta= 49.5 °C</div> <table><thead><tr><th>NO</th><th>Position</th><th>PART NUMBER</th><th>ROOM AMBIENT<br/>Ta= 31.9 °C</th><th>HIGH AMBIENT<br/>Ta=49.5 °C</th></tr></thead><tbody><tr><td>1</td><td>LF1</td><td>TR1021</td><td>43.9°C</td><td>65.3°C</td></tr><tr><td>2</td><td>C10</td><td>105/450V 10% P=15 B32672P4</td><td>42.7°C</td><td>63.5°C</td></tr><tr><td>3</td><td>BD1</td><td>10A/800V GLASS KBJ1008G</td><td>47.5°C</td><td>67.8°C</td></tr><tr><td>4</td><td>D1</td><td>STTH8S06D 8A/600V TO220</td><td>45.2°C</td><td>65.6°C</td></tr><tr><td>5</td><td>Q2</td><td>STP19NM50N 13A/500V</td><td>43.8°C</td><td>64.4°C</td></tr><tr><td>6</td><td>Q3</td><td>STP14NM50N 12A/500V</td><td>44.6°C</td><td>66.1°C</td></tr><tr><td>7</td><td>C5</td><td>180u/400V 105°C 18*40 KMG</td><td>34.7°C</td><td>55.5°C</td></tr><tr><td>8</td><td>L1</td><td>TR1022</td><td>45.9°C</td><td>67.5°C</td></tr><tr><td>9</td><td>U1</td><td>FAN4800AUN</td><td>35.9°C</td><td>57.0°C</td></tr><tr><td>10</td><td>T2</td><td>TR1048</td><td>33.9°C</td><td>55.1°C</td></tr><tr><td>11</td><td>C18</td><td>47u/50V L5Kh 6.3*11 YXF</td><td>37.0°C</td><td>57.9°C</td></tr><tr><td>12</td><td>T1 COIL</td><td>TF2434</td><td>52.3°C</td><td>72.9°C</td></tr><tr><td>13</td><td>TSW1</td><td>ST-22W-R0 85°C 100mm</td><td>43.7°C</td><td>64.2°C</td></tr><tr><td>14</td><td>RTH2</td><td>5KΩ 5Φ TDC05C20J 5%</td><td>43.7°C</td><td>64.4°C</td></tr><tr><td>15</td><td>Q201</td><td>TIP122 5A/100V TO220</td><td>50.3°C</td><td>70.7°C</td></tr><tr><td>16</td><td>Q101</td><td>AP9963GP 160A/40V TO220</td><td>74.8°C</td><td>98.9°C</td></tr><tr><td>17</td><td>Q104</td><td>AP9963GP 160A/40V TO220</td><td>56.8°C</td><td>79.1°C</td></tr><tr><td>18</td><td>L100</td><td>TR1023</td><td>64.5°C</td><td>87.9°C</td></tr><tr><td>19</td><td>C105</td><td>3300u/10V UL10Kh 12.5*20 ZLH</td><td>59.9°C</td><td>83.2°C</td></tr><tr><td>20</td><td>C203</td><td>100u/25V L5Kh 6.3*11 KY</td><td>39.3°C</td><td>60.2°C</td></tr></tbody></table> |                                                                    |                            | NO      | Position | PART NUMBER | ROOM AMBIENT<br>Ta= 31.9 °C | HIGH AMBIENT<br>Ta=49.5 °C | 1 | LF1 | TR1021 | 43.9°C | 65.3°C | 2 | C10 | 105/450V 10% P=15 B32672P4 | 42.7°C | 63.5°C | 3 | BD1 | 10A/800V GLASS KBJ1008G | 47.5°C | 67.8°C | 4 | D1 | STTH8S06D 8A/600V TO220 | 45.2°C | 65.6°C | 5 | Q2 | STP19NM50N 13A/500V | 43.8°C | 64.4°C | 6 | Q3 | STP14NM50N 12A/500V | 44.6°C | 66.1°C | 7 | C5 | 180u/400V 105°C 18*40 KMG | 34.7°C | 55.5°C | 8 | L1 | TR1022 | 45.9°C | 67.5°C | 9 | U1 | FAN4800AUN | 35.9°C | 57.0°C | 10 | T2 | TR1048 | 33.9°C | 55.1°C | 11 | C18 | 47u/50V L5Kh 6.3*11 YXF | 37.0°C | 57.9°C | 12 | T1 COIL | TF2434 | 52.3°C | 72.9°C | 13 | TSW1 | ST-22W-R0 85°C 100mm | 43.7°C | 64.2°C | 14 | RTH2 | 5KΩ 5Φ TDC05C20J 5% | 43.7°C | 64.4°C | 15 | Q201 | TIP122 5A/100V TO220 | 50.3°C | 70.7°C | 16 | Q101 | AP9963GP 160A/40V TO220 | 74.8°C | 98.9°C | 17 | Q104 | AP9963GP 160A/40V TO220 | 56.8°C | 79.1°C | 18 | L100 | TR1023 | 64.5°C | 87.9°C | 19 | C105 | 3300u/10V UL10Kh 12.5*20 ZLH | 59.9°C | 83.2°C | 20 | C203 | 100u/25V L5Kh 6.3*11 KY | 39.3°C | 60.2°C | P |
| NO | Position                                                          | PART NUMBER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ROOM AMBIENT<br>Ta= 31.9 °C                                        | HIGH AMBIENT<br>Ta=49.5 °C |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 1  | LF1                                                               | TR1021                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 43.9°C                                                             | 65.3°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 2  | C10                                                               | 105/450V 10% P=15 B32672P4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 42.7°C                                                             | 63.5°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 3  | BD1                                                               | 10A/800V GLASS KBJ1008G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 47.5°C                                                             | 67.8°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 4  | D1                                                                | STTH8S06D 8A/600V TO220                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 45.2°C                                                             | 65.6°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 5  | Q2                                                                | STP19NM50N 13A/500V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 43.8°C                                                             | 64.4°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 6  | Q3                                                                | STP14NM50N 12A/500V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 44.6°C                                                             | 66.1°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 7  | C5                                                                | 180u/400V 105°C 18*40 KMG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 34.7°C                                                             | 55.5°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 8  | L1                                                                | TR1022                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 45.9°C                                                             | 67.5°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 9  | U1                                                                | FAN4800AUN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 35.9°C                                                             | 57.0°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 10 | T2                                                                | TR1048                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 33.9°C                                                             | 55.1°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 11 | C18                                                               | 47u/50V L5Kh 6.3*11 YXF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 37.0°C                                                             | 57.9°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 12 | T1 COIL                                                           | TF2434                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 52.3°C                                                             | 72.9°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 13 | TSW1                                                              | ST-22W-R0 85°C 100mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 43.7°C                                                             | 64.2°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 14 | RTH2                                                              | 5KΩ 5Φ TDC05C20J 5%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 43.7°C                                                             | 64.4°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 15 | Q201                                                              | TIP122 5A/100V TO220                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 50.3°C                                                             | 70.7°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 16 | Q101                                                              | AP9963GP 160A/40V TO220                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 74.8°C                                                             | 98.9°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 17 | Q104                                                              | AP9963GP 160A/40V TO220                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 56.8°C                                                             | 79.1°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 18 | L100                                                              | TR1023                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 64.5°C                                                             | 87.9°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 19 | C105                                                              | 3300u/10V UL10Kh 12.5*20 ZLH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 59.9°C                                                             | 83.2°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 20 | C203                                                              | 100u/25V L5Kh 6.3*11 KY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 39.3°C                                                             | 60.2°C                     |         |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 2  | OVER LOAD BURN-IN TEST                                            | NO DAMAGE<br>1 HOUR ( MIN )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | I/P : 230 VAC<br>O/P : 108 % LOAD<br>Ta : 25°C                     | TEST : OK                  | P       |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 3  | LOW TEMPERATURE<br>TURN ON TEST                                   | TURN ON AFTER 2 HOUR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | I/P : 264VAC/100VAC<br>O/P : 100 % LOAD<br>Ta= -35 °C              | TEST : OK                  | P       |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 4  | HIGH HUMIDITY<br>HIGH TEMPERATURE<br>HIGH VOLTAGE<br>TURN ON TEST | AFTER 12 HOURS<br>IN CHAMBER ON<br>CONTROL 50 °C<br>NO DAMAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | I/P : 272 VAC<br>O/P : FULL LOAD<br>Ta= 50 °C<br>HUMIDITY= 95 %R.H | TEST : OK                  | P       |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 5  | TEMPERATURE<br>COEFFICIENT                                        | ± 0.03 %/°C (0~50°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | I/P : 230 VAC<br>O/P : FULL LOAD                                   | ± 0.011 %/°C (0~50°C)      | P       |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |
| 6  | STORAGE TEMPERATURE TEST                                          | 1. Thermal shock Temperature : -45°C~ +90°C<br>2. Temperature change rate : 25°C / MIN<br>3. Dwell time low and high temperature : 30 MIN/EACH<br>4. Total test cycle : 5 CYCLE<br>5. Input/Output condition : STATIC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                    | OK                         | P       |          |             |                             |                            |   |     |        |        |        |   |     |                            |        |        |   |     |                         |        |        |   |    |                         |        |        |   |    |                     |        |        |   |    |                     |        |        |   |    |                           |        |        |   |    |        |        |        |   |    |            |        |        |    |    |        |        |        |    |     |                         |        |        |    |         |        |        |        |    |      |                      |        |        |    |      |                     |        |        |    |      |                      |        |        |    |      |                         |        |        |    |      |                         |        |        |    |      |        |        |        |    |      |                              |        |        |    |      |                         |        |        |   |

|    |                             |                                                                                                                                                                                                                                                                                   |                                                                 |   |
|----|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|---|
| 7  | THERMAL SHOCK TEST          | 1. Thermal shock Temperature : -35°C ~ +55°C<br>2. Temperature change rate : 25°C / MIN<br>3. Dwell time low and high temperature : 30 MIN/EACH<br>4. Total test cycle : 10 CYCLE<br>5. Input/Output condition : 230VAC/Full Load AC ON/OFF TEST<br>turn on 58sec ; turn off 2sec | OK                                                              | P |
| 8  | VIBRATION TEST              | 1 Carton & 1 Set<br>(1) Waveform : Sine Wave<br>(2) Frequency : 10~500Hz<br>(3) Sweep Time : 12min/sweep cycle<br>(4) Acceleration : 2G<br>(5) Test Time : 60min in each axis (X.Y.Z)<br>(6) Ta : 25°C                                                                            | TEST : OK                                                       | P |
| 9  | CAPACITOR LIFE CYCLE        | RSP-320-5:SUPPOSE C105 IS THE MOST CRITICAL COMPONENT<br>(1) I/P : 230VAC O/P : FULL LOAD Ta=25 °C LIFE TIME<br>(2) I/P : 230VAC O/P : FULL LOAD Ta=50 °C LIFE TIME<br>(3) I/P : 230VAC O/P : 75% LOAD Ta= 50 °C LIFE TIME<br>(4) I/P : 230VAC O/P : 50% LOAD Ta= 50 °C LIFE TIME | (1) 395170HRS<br>(2) 47085HRS<br>(3) 125883HRS<br>(4) 198983HRS | P |
| 10 | MTBF                        | Conducted by Parts Stress Analysis Prediction<br>1826.4K hrs min. Telcordia SR-332 (Bellcore) ; 192.9K hrs min. MIL-HDBK-217F (25°C)                                                                                                                                              |                                                                 | P |
| 11 | DMTBF/Accelerated Life Test | Demonstration Mean Time Between Failure (Expected Life): Above 30,000 hours @ TA 50°C                                                                                                                                                                                             |                                                                 | P |

| DATE      | SAMPLE         | TEST RESULT | TESTER     | APPROVAL      |
|-----------|----------------|-------------|------------|---------------|
| 2012/8/7  | RD SAMPLE      | PASS        | SANFORD SU | VINCENT TSENG |
| 2012/8/27 | PRODUCT SAMPLE | PASS        | SANFORD SU | VINCENT TSENG |

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