



Test Report:RSP-75-12

75W Single Output Switching Power Supply

■ DESIGN VERIFY TEST

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

■ SAFETY & E.M.C. TEST

Safety Test
E.M.C. Test

■ RELIABILITY TEST

ENVIRONMENT TEST

■ DESIGN VERIFY TEST

OUTPUT FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|----|-----------------------------|----------------------------|---|--|---------|
| 1 | RIPPLE & NOISE | V1 : 120 mVp-p (Max) | I/P : 230VAC O/P : FULL LOAD Ta : 25°C | V1 : 15 mVp-p (Max) | P |
| 2 | OUTPUT VOLTAGE ADJUST RANGE | CH1 : 11.4 V ~ 13.2 V | I/P : 230 VAC I/P : 115 VAC O/P : MIN LOAD Ta : 25°C | 10.45 V ~ 13.85 V / 230 VAC 10.46 V ~ 13.85 V / 115 VAC | P |
| 3 | OUTPUT VOLTAGE TOLERANCE | V1 : -2 % ~ +2 % (Max) | I/P : 100 VAC / 264 VAC O/P : FULL / MIN LOAD Ta : 25°C | V1 : -0.257 % ~ 0.315 % | P |
| 4 | LINE REGULATION | V1 : -0.5 % ~ +0.5 % (Max) | I/P : 100 VAC ~ 264 VAC O/P : FULL LOAD Ta : 25°C | V1 : 0 % ~ 0 % | P |
| 5 | LOAD REGULATION | V1 : -0.5 % ~ +0.5 % (Max) | I/P : 230 VAC O/P : FULL ~ MIN LOAD Ta : 25°C | V1 : -0.257 % ~ 0.306 % | P |
| 6 | SET UP TIME | 230VAC : 600 ms (Max) | I/P : 230 VAC O/P : FULL LOAD Ta : 25°C | 230VAC / 522 ms | P |
| 7 | RISE TIME | 230VAC : 30 ms (Max) | I/P : 230 VAC O/P : FULL LOAD Ta : 25°C | 230VAC / 10.7 ms | P |
| 8 | HOLD UP TIME | 230VAC : 16 ms (TYP) | I/P : 230 VAC O/P : FULL LOAD Ta : 25°C | 230VAC / 52.6 ms | P |
| 9 | OVER/UNDERSHOOT TEST | < ±5% | I/P : 230 VAC O/P : FULL LOAD Ta : 25°C | TEST : <5 % | P |
| 10 | DYNAMIC LOAD | V1 : 1200 mVp-p | I/P : 230 VAC (1).O/P : FULL /Min LOAD 90%DUTY/ 1KHZ (2).O/P : FULL /Min LOAD 90%DUTY/ 3KHZ (3).O/P : FULL /Min LOAD 90%DUTY/ 5KHZ (4).O/P : FULL /Min LOAD 50%DUTY/ 120HZ Ta : 25°C | (1) 236 mVp-p (2) 226 mVp-p (3) 222 mVp-p (4) 910 mVp-p | P |

INPUT FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|----|-----------------------|--|--|--|---------|
| 1 | INPUT VOLTAGE RANGE | 85VAC~264 VAC | I/P : TESTING O/P : FULL LOAD Ta : 25°C I/P : LOW-LINE-3V= 82 V HIGH-LINE+15%=300 V O/P : FULL/MIN LOAD ON : 30 Sec . OFF : 30 Sec 10MIN (AC POWER ON/OFF NO DAMAGE) | 60 V~264V TEST : OK | P |
| 2 | INPUT FREQUENCY RANGE | 47HZ ~63 HZ NO DAMAGE OSC | I/P : 85 VAC ~ 264 VAC O/P : FULL-MIN LOAD Ta : 25°C | TEST : OK | P |
| 3 | POWER FACTOR | 0.93 / 230 VAC(TYP) 0.98 / 115 VAC(TYP) | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | PF= 0.969 / 230 VAC PF= 0.983 / 115 VAC | P |
| 4 | EFFICIENCY | 85% (TYP) | I/P : 230 VAC O/P : FULL LOAD Ta : 25°C | 85.9 % | P |
| 5 | INPUT CURRENT | 230V/ 0.5 A (TYP) 115V/ 0.9 A (TYP) | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | I = 0.395 A/ 230 VAC I = 0.791 A/ 115 VAC | P |
| 6 | INRUSH CURRENT | 230V/ 35 A (TYP) COLD START | I/P : 230 VAC O/P : FULL LOAD Ta : 25°C | I = 30.2 A/ 230 VAC | P |
| 7 | LEAKAGE CURRENT | < 2 mA / 240VAC | I/P : 264 VAC O/P : Min LOAD Ta : 25°C | L-FG : 0.25 mA N-FG : 0.22 mA | P |

PROTECTION FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|----|-----------------------------|--|---|---|---------|
| 1 | OVER LOAD PROTECTION | 105 % ~135 % | I/P : 230 VAC I/P : 115 VAC O/P : TESTING Ta : 25°C | 124.9 %/230VAC 123.5 %/115VAC Constant Current Limiting | P |
| 2 | OVER VOLTAGE PROTECTION | CH1 : 13.2 V ~16.2 V | I/P : 230 VAC I/P : 115 VAC O/P : MIN LOAD Ta : 25°C | 15.72 V/230VAC 15.71 V/ 115 VAC Shut down Re- power ON | P |
| 3 | OVER TEMPERATURE PROTECTION | SPEC : Shut down o/p voltage , recovers automatically after temperature goes down | I/P : 230 VAC O/P : FULL LOAD | O.T.P. Active Shut down o/p voltage , recovers automatically after temperature goes down | P |
| 4 | SHORT PROTECTION | SHORT EVERY OUTPUT 1 HOUR NO DAMAGE | I/P : 264 VAC O/P : FULL LOAD Ta : 25°C | NO DAMAGE Constant Current Limiting | P |

CONTROL FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|----|----------------|---|---|---|---------|
| 1 | REMOTE CONTROL | CN1 POWER ON : < 0-0.8V" POWEROFF : 4-10 V" | I/P : 230 VAC O/P : FULL LOAD Ta : 25°C | POWER ON : <0-0.8 V POWER OFF : 4-10 V | P |

COMPONENT STRESS TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|----|--|---|--|---|---------|
| 1 | Power Transistor (D to S) or (C to E) Peak Voltage | Q3 Rated : 600 V 10 A | I/P : High-Line +3V = 267 V O/P : (1)Full Load Turn on (2) Output Short (3)Full load continue (4) Dynamic Load 90%Duty/1KHz (5) Dynamic Load 50%Duty/120Hz Ta : 25°C | (1) 452 V (2) 496 V (3) 448 V (4) 456 V (5) 492 V | P |
| 2 | Diode Peak Voltage | Q103 Rated : 100 V 20 A | I/P : High-Line +3V = 267 V O/P : (1)Full Load Turn on (2)Output Short (3)Full load continue (4)NO LOAD TURN ON Ta : 25°C | (1) 77.6 V (2) 66.5 V (3) 62.5 V (4) 68.8 V | P |
| 3 | Clamp Diode Peak Voltage | D8 Rted : 600 V 1 A | I/P : High-Line +3V = 267 V O/P : (1) Dynamic Load 90%Duty/1KHz (2)Full load continue Ta : 25°C | (1) 404 V (2) 396 V | P |
| 4 | Input Capacitor Voltage | C 5 Rated : 68u /400V/105°C Surge Voltage:450V | I/P : High-Line +3V = 267 V O/P : (1)Full Load Turn on /Off (2) Min load Turn on /Off (3)Full Load /Min load Change Ta : 25°C | (1) 396 V (2) 396 V (3) 398 V | P |
| 5 | Control IC Voltage Test | U 1 Rated : 38 V | I/P : High-Line +3V = 267 V O/P : (1)Full Load Turn on /Off (2) Min load Turn on /Off (3)Full Load /Min load Change Ta : 25°C | (1) 23.0 V (2) 23.0 V (3) 23.1 V | P |
| 6 | PFC Transistor (D to S) or (C to E) Peak Voltage | Q 1 Rated : 600 V 10 A | I/P : High-Line +3V = 267 V O/P : (1)Full Load Turn on (2) Output Short (3)Full load continue Ta : 25°C | (3) 428 V (4) 424 V (3) 436 V | P |

■ SAFETY & E.M.C. TEST

SAFETY TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|----|----------------------|--|---|---|---------|
| 1 | WITHSTAND VOLTAGE | I/P-O/P : 3.75 KVAC/min I/P-FG : 2KVAC/min O/P-FG : 0.5 KVAC/min | I/P-O/P : 4.2 KVAC/min I/P-FG : 2.4 KVAC/min O/P-FG : 0.6 KVAC/min Ta : 25°C | I/P-O/P : 3.207 mA I/P-FG : 2.791 mA O/P-FG : 1.243 mA NO DAMAGE | P |
| 2 | ISOLATION RESISTANCE | I/P-O/P : 500VDC>100MΩ I/P-FG : 500VDC>100MΩ O/P-FG : 500VDC>100MΩ | I/P-O/P : 500 VDC I/P-FG : 500 VDC O/P-FG : 500 VDC Ta : 25°C /70%RH | I/P-O/P : 9999 MΩ I/P-FG : 9999 MΩ O/P-FG : 9999 MΩ NO DAMAGE | P |
| 3 | GROUNDING CONTINUITY | FG(PE) TO CHASSIS OR TRACE < 100 mΩ | 40 A / 2min Ta : 25°C / 70%RH | 5 mΩ | P |

E.M.C TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|----|---|---|--|-------------------------------|---------|
| 1 | HARMONIC | EN61000-3-2 CLASS A CLASS D | I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C | PASS | P |
| 2 | CONDUCTION | EN55022 CLASS B | I/P : 230 VAC (50HZ) O/P : FULL/50% LOAD Ta : 25°C | PASS Test by certified Lab | P |
| 3 | RADIATION | EN55022 CLASS B | I/P : 230 VAC (50HZ) O/P : FULL LOAD Ta : 25°C | PASS Test by certified Lab | P |
| 4 | E.S.D | EN61000-4-2 LIGHT INDUSTRY AIR : 8KV / Contact : 4KV | I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C | CRITERIA A | P |
| 5 | E.F.T | EN61000-4-4 LIGHT INDUSTRY INPUT : 1KV | I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C | CRITERIA A | P |
| 6 | SURGE | IEC61000-4-5 LIGHT INDUSTRY L-N : 1KV L,N-PE : 2KV | I/P : 230 VAC/50HZ O/P : FULL LOAD 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|---|--|--|--------------------|----------|---------------------------|---------------------------|---|------|-------|-------|---|----|-------|-------|---|----|-------|-------|---|------|-------|-------|---|-----|-------|-------|---|-----|-------|-------|---|----|-------|-------|---|----|-------|-------|---|----|-------|-------|----|----|-------|-------|----|----|-------|-------|----|----|-------|-------|----|----|-------|-------|----|--------|-------|--------|----|------|-------|-------|----|-----|-------|-------|----|------|-------|-------|----|------|-------|-------|----|------|-------|-------|----|-----|-------|-------|--|---|
| 1 | TEMPERATURE RISE TEST | MODEL : RSP-75-24 1. ROOM AMBIENT BURN-IN : 2 HRS I/P : 230VAC O/P : FULL LOAD Ta=28.2℃ 2. HIGH AMBIENT BURN-IN : 2 HRS I/P : 230VAC O/P : FULL LOAD Ta=40.2℃ | <table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>ROOM AMBIENT Ta= 28.2℃</th> <th>HIGH AMBIENT Ta= 40.2℃</th> </tr> </thead> <tbody> <tr><td>1</td><td>U100</td><td>47.5℃</td><td>59.7℃</td></tr> <tr><td>2</td><td>U1</td><td>54.4℃</td><td>66.7℃</td></tr> <tr><td>3</td><td>D3</td><td>54.7℃</td><td>66.1℃</td></tr> <tr><td>4</td><td>ZNR1</td><td>42.0℃</td><td>54.3℃</td></tr> <tr><td>5</td><td>LF1</td><td>44.6℃</td><td>56.9℃</td></tr> <tr><td>6</td><td>BD1</td><td>58.7℃</td><td>70.1℃</td></tr> <tr><td>7</td><td>L3</td><td>58.3℃</td><td>70.1℃</td></tr> <tr><td>8</td><td>Q1</td><td>51.6℃</td><td>63.6℃</td></tr> <tr><td>9</td><td>D2</td><td>51.7℃</td><td>63.3℃</td></tr> <tr><td>10</td><td>C5</td><td>60.3℃</td><td>72.5℃</td></tr> <tr><td>11</td><td>T2</td><td>52.1℃</td><td>66.1℃</td></tr> <tr><td>12</td><td>Q3</td><td>55.6℃</td><td>68.6℃</td></tr> <tr><td>13</td><td>Q4</td><td>58.4℃</td><td>71.4℃</td></tr> <tr><td>14</td><td>T1coil</td><td>89.7℃</td><td>101.4℃</td></tr> <tr><td>15</td><td>C105</td><td>54.3℃</td><td>66.5℃</td></tr> <tr><td>16</td><td>C18</td><td>54.3℃</td><td>68.3℃</td></tr> <tr><td>17</td><td>Q101</td><td>68.3℃</td><td>79.4℃</td></tr> <tr><td>18</td><td>C150</td><td>46.3℃</td><td>58.9℃</td></tr> <tr><td>19</td><td>RTH2</td><td>69.3℃</td><td>81.1℃</td></tr> <tr><td>20</td><td>C61</td><td>51.2℃</td><td>63.4℃</td></tr> </tbody> </table> | NO | Position | ROOM AMBIENT Ta= 28.2℃ | HIGH AMBIENT Ta= 40.2℃ | 1 | U100 | 47.5℃ | 59.7℃ | 2 | U1 | 54.4℃ | 66.7℃ | 3 | D3 | 54.7℃ | 66.1℃ | 4 | ZNR1 | 42.0℃ | 54.3℃ | 5 | LF1 | 44.6℃ | 56.9℃ | 6 | BD1 | 58.7℃ | 70.1℃ | 7 | L3 | 58.3℃ | 70.1℃ | 8 | Q1 | 51.6℃ | 63.6℃ | 9 | D2 | 51.7℃ | 63.3℃ | 10 | C5 | 60.3℃ | 72.5℃ | 11 | T2 | 52.1℃ | 66.1℃ | 12 | Q3 | 55.6℃ | 68.6℃ | 13 | Q4 | 58.4℃ | 71.4℃ | 14 | T1coil | 89.7℃ | 101.4℃ | 15 | C105 | 54.3℃ | 66.5℃ | 16 | C18 | 54.3℃ | 68.3℃ | 17 | Q101 | 68.3℃ | 79.4℃ | 18 | C150 | 46.3℃ | 58.9℃ | 19 | RTH2 | 69.3℃ | 81.1℃ | 20 | C61 | 51.2℃ | 63.4℃ | | P |
| NO | Position | ROOM AMBIENT Ta= 28.2℃ | HIGH AMBIENT Ta= 40.2℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | U100 | 47.5℃ | 59.7℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | U1 | 54.4℃ | 66.7℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | D3 | 54.7℃ | 66.1℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | ZNR1 | 42.0℃ | 54.3℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | LF1 | 44.6℃ | 56.9℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | BD1 | 58.7℃ | 70.1℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | L3 | 58.3℃ | 70.1℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Q1 | 51.6℃ | 63.6℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | D2 | 51.7℃ | 63.3℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | C5 | 60.3℃ | 72.5℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | T2 | 52.1℃ | 66.1℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Q3 | 55.6℃ | 68.6℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Q4 | 58.4℃ | 71.4℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | T1coil | 89.7℃ | 101.4℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | C105 | 54.3℃ | 66.5℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | C18 | 54.3℃ | 68.3℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | Q101 | 68.3℃ | 79.4℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | C150 | 46.3℃ | 58.9℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | RTH2 | 69.3℃ | 81.1℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | C61 | 51.2℃ | 63.4℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | OVER LOAD BURN-IN TEST | NO DAMAGE 1 HOUR (MIN) | I/P : 230 VAC O/P : 115 % LOAD Ta : 25℃ | TEST : OK | P | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | LOW TEMPERATURE TURN ON TEST | TURN ON AFTER 2 HOUR | I/P : 264VAC/100VAC O/P : 100 % LOAD Ta= -30℃ | TEST : OK | P | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST | AFTER 12 HOURS IN CHAMBER ON CONTROL 50 ℃ NO DAMAGE | I/P : 272 VAC O/P : FULL LOAD Ta=50℃ HUMIDITY= 95 %R.H | TEST : OK | P | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | TEMPERATURE COEFFICIENT | ± 0.05%/℃ (0-50℃) | I/P : 230 VAC O/P : FULL LOAD | ± 0.01 %/℃ (0-50℃) | P | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | STORAGE TEMPERATURE TEST | 1. Thermal shock Temperature : -40℃~ +85℃ 2. Temperature change rate : 25℃ / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 5 CYCLE 5. Input/Output condition : STATIC | | OK | P | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | |
|----|-----------------------------|--|---|---|
| 7 | THERMAL SHOCK TEST | 1. Thermal shock Temperature : -25°C~ +70°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 10 CYCLE 5. Input/Output condition : 230VAC/Full Load AC ON/OFF TEST turn on 58sec ; turn off 2sec | OK | P |
| 8 | VIBRATION TEST | 1 Carton & 1 Set (1) Waveform : Sine Wave (2) Frequency : 10-500Hz (3) Sweep Time : 12min/sweep cycle (4) Acceleration : 2G (5) Test Time : 60min in each axis (X.Y.Z) (6) Ta : 25°C | TEST : OK | P |
| 9 | CAPACITOR LIFE CYCLE | SUPPOSE C105 IS THE MOST CRITICAL COMPONENT (1) I/P : 230VAC O/P : FULL LOAD Ta= 25°C LIFE TIME (2) I/P : 230VAC O/P : FULL LOAD Ta=50°C LIFE TIME (3) I/P : 230VAC O/P : 75% LOAD Ta= 50°C LIFE TIME (4) I/P : 230VAC O/P : 50% LOAD Ta= 50°C LIFE TIME | (1) 497289 HRS (2) 86696 HRS (3) 152045 HRS (4) 209091 HRS | P |
| 10 | MTBF | MIL-HDBK-217F NOTICE S2 PARTS COUNT TOTAL FAILURE RATE : 296.7 KHRS | | P |
| 11 | DMTBF/Accelerated Life Test | Demonstration Mean Time Between Failure (Expected Life): Above 30,000 hours @ TA 50°C | | P |

| SAMPLE | TEST RESULT | TESTER | APPROVAL |
|----------------|-------------|--------|----------|
| PRODUCT SAMPLE | PASS | Shenym | Wangdz |

2007/3/20 A50-S014