



Test Report: GST220A24-R7B

220W AC-DC High Reliability Industrial Adaptor

■ 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

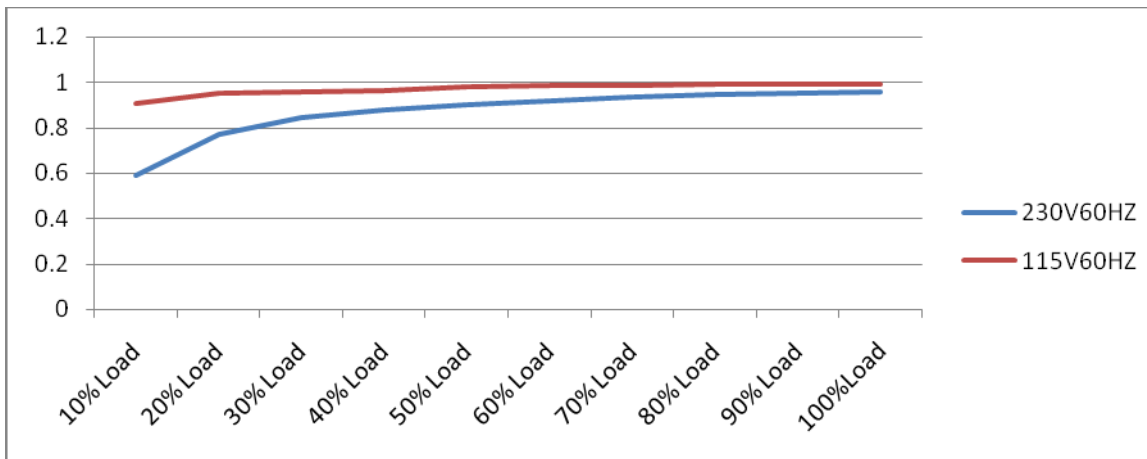
| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|--|-------------------------------|--------------------------------|--|----------------------------------|
| 1 | OUTPUT VOLTAGE(Max) TOLERANCE | V1: -3%~ 3% | I/P: 100VAC /264VAC O/P:FULL/ MIN. LOAD Ta:25°C | V1: -0.753%~ 0.544% |
| 2 | LINE REGULATION (Max) | V1: -1%~ 1% | I/P: 100VAC~ 264VAC O/P:FULL LOAD Ta:25°C | V1: 0%~ 0% |
| 3 | LOAD REGULATION(Max) | V1: -3%~ 3% | I/P: 230VAC O/P:FULL -MIN LOAD Ta:25°C | V1: -0.753%~ 0.544% |
| 4 | OVER/UNDERSHOOT TEST | < ±5% | I/P: 230VAC O/P:FULL LOAD Ta:25°C | < ±5% |
| 5 | RIPPLE & NOISE(Max) | V1: 150mVp-p | I/P:230VAC O/P:FULL LOAD Ta:25°C | V1: 15.8mVp-p |
| <div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>high frequency :</p> </div> <div style="width: 45%;"> <p>low frequency :</p> </div> </div> | | | | |
| 6 | SET UP TIME(Max) | 230VAC/2000ms 115VAC/2000ms | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | 230VAC/ 952ms 115VAC/ 1090ms |
| <div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage</p> </div> <div style="width: 45%;"> <p>INPUT=115VAC/60HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage</p> </div> </div> | | | | |
| 7 | RISE TIME (Max) | 230VAC/50ms 115VAC/50ms | I/P : 230 VAC I/P : 115 VAC | 230VAC/ 17.2ms 115VAC/ 18.4ms |

| | | | |
|--|---------------------|--|---|
| | | O/P : FULL LOAD Ta : 25°C | |
| INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage | | INPUT=115VAC/60HZ @ FULL LOAD CH1 : Output Voltage | |
| <p>Δ: 1.40 V @: 14.9 V Δ: 17.2ms @: 0.00 s</p> | | <p>Δ: 18.7 V @: 2.30 V Δ: 18.4ms @: 0.00 s</p> | |
| 8 | HOLD UP TIME (Typ.) | 230VAC/20ms 115VAC/20ms | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C |
| | | 230VAC/26.4ms 115VAC/26.0ms | |
| INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage | | INPUT=115VAC/60HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage | |
| <p>Δ: 166 V @: -152 V Δ: 26.4ms @: -58.8ms</p> | | <p>Δ: 34.0 V @: -32.0 V Δ: 26.0ms @: -58.8ms</p> | |
| 9 | DYNAMIC LOAD | V1: 1200mVp-p | I/P: 230VAC O/P: (1)FULL /50% LOAD 50%DUTY / 120HZ (2)FULL /50% LOAD 50%DUTY / 1KHZ Ta:25°C |
| | | 374mVp-p 374mVp-p | |
| FULL /50% LOAD 50%DUTY / 120HZ | | FULL /50% LOAD 50%DUTY / 1KHZ | |
| <p>Ch1 Pk-Pk 374mV</p> | | <p>Ch1 Pk-Pk 374mV</p> | |

INPUT FUNCTION TEST

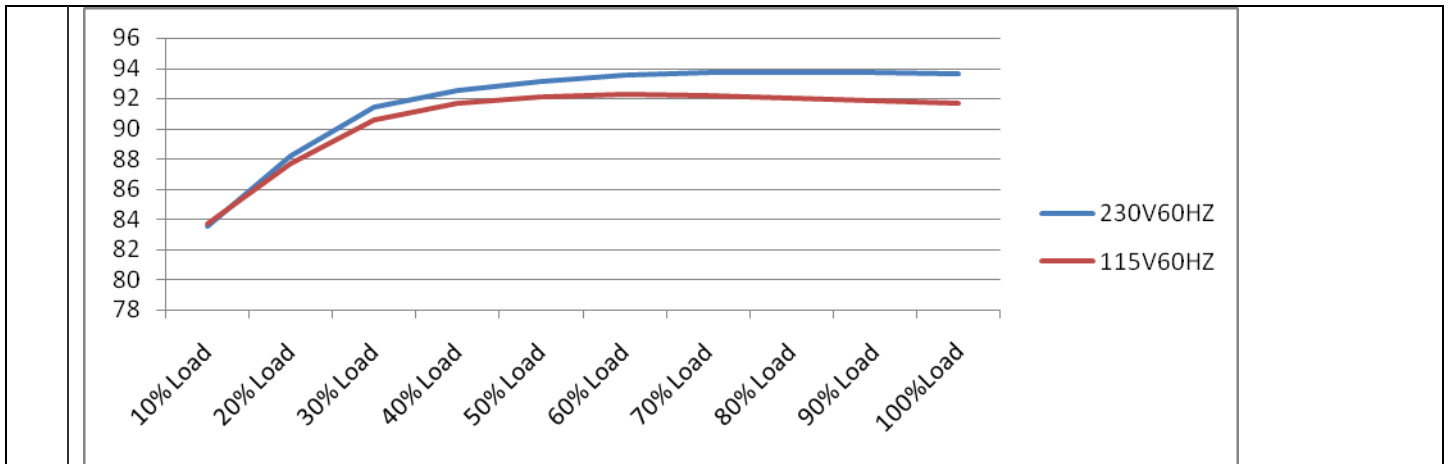
| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|-----------------------|-----------------------------|---|--|
| 1 | INPUT VOLTAGE RANGE | 95VAC~264VAC | I/P:TESTING O/P:FULL LOAD Ta:25°C | 72V~264V |
| | | | I/P: LOW-LINE-3V=82 V HIGH-LINE+15%=300 V O/P:FULL/MIN LOAD (PLEASE CHECK DERATING CURVE) ON: 30 Sec OFF: 30 Sec 10MIN (POWER ON/OFF NO DAMAGE) | TEST:OK |
| 2 | INPUT FREQUENCY RANGE | 47HZ ~63 HZ NO DAMAGE | I/P:100 VAC ~264 VAC O/P:FULL-MIN LOAD Ta:25°C | TEST: OK |
| 3 | INPUT CURRENT (Typ.) | 230V/ 2A 115V/ 4A | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | I =1.057A/ 230VAC I =2.076A/ 115VAC |
| 4 | LEAKAGE CURRENT | <0.75 mA / 240 VAC | I/P : 240 VAC O/P : Min LOAD Ta : 25°C | L-FG : 0.352 mA N-FG : 0.352 mA |
| 5 | NO LOAD CONSUMPTION | < 0.15W | I/P : 115VAC I/P : 230VAC O/P : NO LOAD Ta : 25°C | < 0.0957 W < 0.1023 W |
| 6 | POWER FACTOR (Typ.) | 0.91/ 230VAC 0.98/115VAC | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | PF=0.954/230VAC PF=0.991/115VAC |

P.F vs LOAD

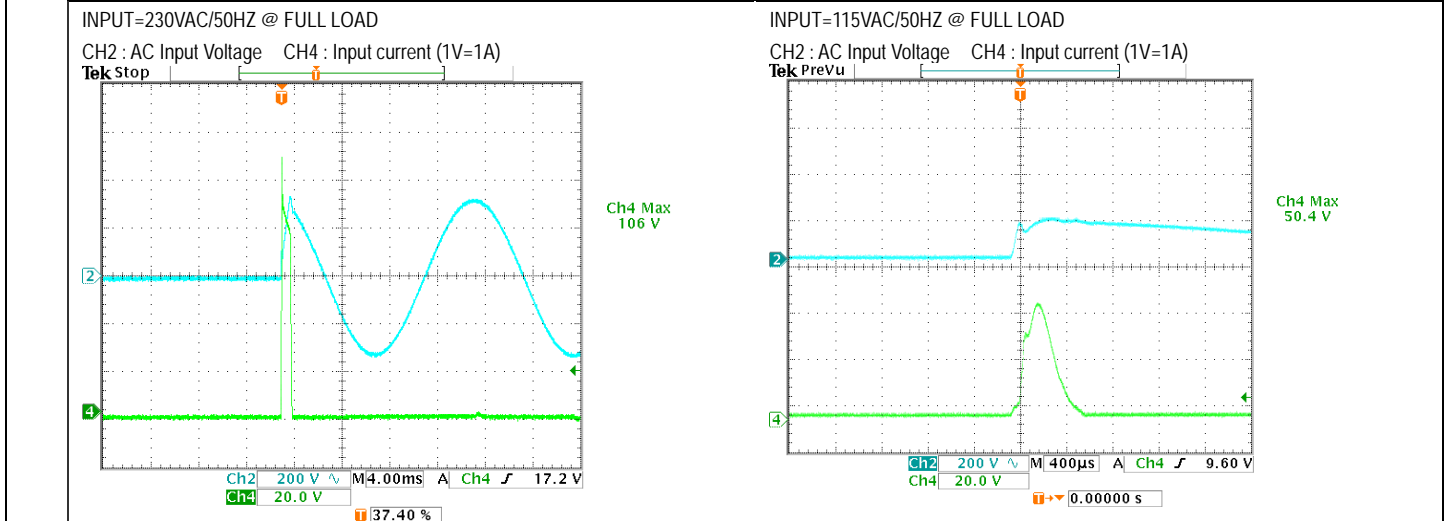


| | | | | |
|---|------------------|-------|---|--------|
| 7 | EFFICIENCY(Typ.) | 93.5% | I/P:230 VAC O/P:FULL LOAD Ta:25°C | 94.01% |
|---|------------------|-------|---|--------|

EFFICIENCY vs LOAD



| | | | | |
|---|----------------------|------------|-----------------|------------------|
| 8 | INRUSH CURRENT(Typ.) | 230V/120A | I/P : 230 VAC | I =104A/ 230VAC |
| | | 115V/60A | I/P : 115 VAC | I =50.4A/ 115VAC |
| | | COLD START | O/P : FULL LOAD | |
| | | | Ta : 25°C | |



PROTECTION FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|-----------------------------|--|--|---|
| 1 | OVER LOAD PROTECTION | 105%~ 135% | I/P: 264VAC I/P: 230VAC I/P: 100VAC O/P: TESTING Ta:25°C | 126.63%/ 264VAC 126.30%/ 230VAC 127.17%/100VAC PROTECTION TYPE : Hiccup mode,recovers automatically after fault condition is removed |
| 2 | OVER VOLTAGE PROTECTION | 25.2V-32.4V | I/P: 264VAC I/P: 230VAC I/P: 90VAC O/P:MIN LOAD Ta:25°C | 29.8V/ 264VAC 29.8V/ 230VAC 29.8V/ 90VAC PROTECTION TYPE : Shot down o/p voltage,re-power on to recover |
| 3 | OVER TEMPERATURE PROTECTION | Protection type : | I/P: 264VAC I/P: 90VAC O/P:FULL LOAD | O.T.P: Active Protection type :Shut down o/p voltage,recovers automatically after temperature goes down |
| 4 | SHORT PROTECTION | SHORT EVERY OUTPUT 1 HOUR NO DAMAGE | I/P: 264VAC I/P: 90VAC O/P: FULL LOAD Ta:25°C | NO DAMAGE PROTECTION TYPE : Hiccup mode,recovers automatically after fault condition is removed |

COMPONENT STRESS TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|--|---|---|--|
| 1 | PWM Transistor (D to S) or (C to E) Peak Voltage | Q5 Rated : 18A/ 600V | I/P:High-Line +3V =267V AC ON/OFF VDS: O/P: (1)Full Load (2)Output Short (3) Full Load Continue Ta:25°C | VDS: (1)V432 (2) 432V (3) 424V |
| 2 | P.F.C Transistor (D to S) or (C to E) Peak Voltage | Q1 Rated : 15.8 A/ 600 V | I/P:High-Line +3V =267V AC ON/OFF VDS: O/P: (1)Full Load (2)Output Short (3) Full Load Continue Ta:25°C | VDS: (1)468V (2) 464V (3) 442V |
| 3 | P.F.C DIODE | D2 Rated : 15 A/ 600 V | I/P:High-Line +3V =267 V AC ON/OFF O/P: (1)Full Load (2)Output Short (3)Dynamic Load Full Load/ Min. Load 90%Duty/5KHz (4)Dynamic Load 100% Load/ Min. Load 50%Duty/120Hz Ta:25°C | (1)422 V (2) 426V (3) 422V (4) 422V |
| 4 | Diode Peak Voltage | Q101 Rated : 80 A/ 75V | I/P:High-Line +3V =267V AC ON/OFF VDS: O/P: (1)Full Load (2)Output Short (3) Full Load Continue | Q101: VDS: (1) 58.0V (2) 6.56V (3) 58.0V |
| 5 | Input Capacitor Voltage | C5 Rated: : 220 μ /450 V 105 °C | I/P:High-Line +3V =267 V O/P: (1)Full Load input on/off (2) Min load input on /Off (3)Full Load /Min load Change Ta:25°C | (1) 420V (2)420V (3)416V |
| 6 | Control IC Voltage Test | PWM IC U1 Rated : 32V -0.4 V(MIN.) | I/P:High-Line +3V =267 V AC ON/OFF O/P(1)FULL LOAD (2) Output Short (3)O.L.P (4)O.V.P. Ta:25°C | (1) 25.7V (2) 20.2V (3) 20.2V (4) 28.6V |

SAFETY TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|----------------------|--|--|--|
| 1 | WITHSTAND VOLTAGE | I/P-O/P: 3KVAC/min I/P-FG:2KVAXIC/min | I/P-O/P: 3.6 KVAC/min I/P-FG:2.4KVAXIC/min Ta:25°C | I/P-O/P:7.45mA I/P-FG:3.44mA NO DAMAGE |
| 2 | ISOLATION RESISTANCE | I/P-O/P:500VDC>100M Ω | I/P-O/P: 500 VDC Ta:25°C | I/P-O/P: 9999M Ω NO DAMAGE |

E.M.C TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|---|---|--|-------------------------------|
| 1 | HARMONIC | EN61000-3-2 CLASS A | I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C | PASS |
| 2 | CONDUCTION | EN55022 CLASS B | I/P : 230 VAC (50HZ) O/P : FULL/50% LOAD Ta : 25°C | PASS Test by certified Lab |
| 3 | RADIATION | EN55022 CLASS B | I/P : 230 VAC (50HZ) O/P : FULL LOAD Ta : 25°C | PASS Test by certified Lab |
| 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 |
| 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 |
| 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 |
| 7 | Test by certified Lab & Test Report Prepare | | | |

■ RELIABILITY TEST

ENVIRONMENT TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|---|---|--|--|----|----------|------------------------|--------------------------|---|-----|--------|--------|---|----|--------|--------|---|----|--------|--------|---|-----|--------|--------|---|----|--------|--------|---|-----|--------|--------|---|----|--------|--------|---|----|--------|--------|---|----|--------|--------|----|----|--------|--------|----|-----|--------|--------|----|-----|--------|--------|----|----|--------|---------|----|----|--------|--------|----|------|--------|--------|----|------|--------|--------|----|------|--------|---------|----|------|--------|--------|----|----|--------|--------|
| 1 | TEMPERATURE RISE TEST | MODEL : GST220A20-R7B 1. ROOM AMBIENT BURN-IN : 1HRS I/P : 230VAC O/P : FULL LOAD Ta=27 °C 2. HIGH AMBIENT BURN-IN : 1HRS I/P : 230VAC O/P : FULL LOAD Ta= 53.8 °C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | <table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>ROOM AMBIENT Ta= 27 °C</th> <th>HIGH AMBIENT Ta= 53.8 °C</th> </tr> </thead> <tbody> <tr><td>1</td><td>LF2</td><td>61.0°C</td><td>89.0°C</td></tr> <tr><td>2</td><td>L2</td><td>63.0°C</td><td>91.4°C</td></tr> <tr><td>3</td><td>C2</td><td>59.4°C</td><td>85.9°C</td></tr> <tr><td>4</td><td>C11</td><td>62.6°C</td><td>91.4°C</td></tr> <tr><td>5</td><td>C1</td><td>60.5°C</td><td>89.2°C</td></tr> <tr><td>6</td><td>BD1</td><td>63.0°C</td><td>90.5°C</td></tr> <tr><td>7</td><td>D2</td><td>64.7°C</td><td>92.7°C</td></tr> <tr><td>8</td><td>Q2</td><td>63.6°C</td><td>91.9°C</td></tr> <tr><td>9</td><td>L1</td><td>65.9°C</td><td>95.0°C</td></tr> <tr><td>10</td><td>C5</td><td>66.7°C</td><td>95.5°C</td></tr> <tr><td>11</td><td>C81</td><td>65.5°C</td><td>94.1°C</td></tr> <tr><td>12</td><td>C13</td><td>69.1°C</td><td>98.2°C</td></tr> <tr><td>13</td><td>T1</td><td>74.5°C</td><td>105.0°C</td></tr> <tr><td>14</td><td>U4</td><td>66.7°C</td><td>94.7°C</td></tr> <tr><td>15</td><td>TSW1</td><td>59.5°C</td><td>88.7°C</td></tr> <tr><td>16</td><td>RTH2</td><td>63.1°C</td><td>90.6°C</td></tr> <tr><td>17</td><td>Q102</td><td>70.5°C</td><td>100.9°C</td></tr> <tr><td>18</td><td>C109</td><td>68.6°C</td><td>98.3°C</td></tr> <tr><td>19</td><td>U1</td><td>71.4°C</td><td>99.6°C</td></tr> </tbody> </table> | NO | Position | ROOM AMBIENT Ta= 27 °C | HIGH AMBIENT Ta= 53.8 °C | 1 | LF2 | 61.0°C | 89.0°C | 2 | L2 | 63.0°C | 91.4°C | 3 | C2 | 59.4°C | 85.9°C | 4 | C11 | 62.6°C | 91.4°C | 5 | C1 | 60.5°C | 89.2°C | 6 | BD1 | 63.0°C | 90.5°C | 7 | D2 | 64.7°C | 92.7°C | 8 | Q2 | 63.6°C | 91.9°C | 9 | L1 | 65.9°C | 95.0°C | 10 | C5 | 66.7°C | 95.5°C | 11 | C81 | 65.5°C | 94.1°C | 12 | C13 | 69.1°C | 98.2°C | 13 | T1 | 74.5°C | 105.0°C | 14 | U4 | 66.7°C | 94.7°C | 15 | TSW1 | 59.5°C | 88.7°C | 16 | RTH2 | 63.1°C | 90.6°C | 17 | Q102 | 70.5°C | 100.9°C | 18 | C109 | 68.6°C | 98.3°C | 19 | U1 | 71.4°C | 99.6°C |
| NO | Position | ROOM AMBIENT Ta= 27 °C | HIGH AMBIENT Ta= 53.8 °C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | LF2 | 61.0°C | 89.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | L2 | 63.0°C | 91.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | C2 | 59.4°C | 85.9°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | C11 | 62.6°C | 91.4°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | C1 | 60.5°C | 89.2°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | BD1 | 63.0°C | 90.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | D2 | 64.7°C | 92.7°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Q2 | 63.6°C | 91.9°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | L1 | 65.9°C | 95.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | C5 | 66.7°C | 95.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | C81 | 65.5°C | 94.1°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | C13 | 69.1°C | 98.2°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | T1 | 74.5°C | 105.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | U4 | 66.7°C | 94.7°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | TSW1 | 59.5°C | 88.7°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | RTH2 | 63.1°C | 90.6°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | Q102 | 70.5°C | 100.9°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | C109 | 68.6°C | 98.3°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | U1 | 71.4°C | 99.6°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | OVER LOAD BURN-IN TEST | NO DAMAGE 1 HOUR (MIN) | I/P : 230 VAC O/P : 130 % LOAD Ta : 25°C | TEST : OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | LOW TEMPERATURE TURN ON TEST | TURN ON AFTER 2 HOUR | I/P : 264VAC/100VAC O/P : 100 % LOAD Ta= -35 °C | TEST : OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST | AFTER 12 HOURS IN CHAMBER ON CONTROL 50 °C NO DAMAGE | I/P : 272 VAC O/P : FULL LOAD Ta= 50.1 °C HUMIDITY= 95 %R.H | TEST : OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | TEMPERATURE COEFFICIENT | ± 0.03 %/°C(0-50°C) | I/P : 230 VAC O/P : FULL LOAD | ± 0.003 %/°C(0-50°C) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | STORAGE TEMPERATURE TEST | 1. Thermal shock Temperature : -40°C~ +85°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 5 CYCLE 5. Input/Output condition : STATIC | | OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



| | | | |
|----|-----------------------------|---|---|
| 7 | THERMAL SHOCK TEST | <ol style="list-style-type: none"> 1. Thermal shock Temperature : -30°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 |
| 8 | VIBRATION TEST | 1 Carton & 1 Set <ol style="list-style-type: none"> (1) Waveform : Sine Wave (2) Frequency : 10-500Hz (3) Sweep Time : 12min/sweep cycle (4) Acceleration : 2G (5) Test Time : 60min in each axis (X.Y.Z) (6) Ta : 25°C | TEST : OK |
| 9 | CAPACITOR LIFE CYCLE | SUPPOSE C 109 IS THE MOST CRITICAL COMPONENT <ol style="list-style-type: none"> (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 | <ol style="list-style-type: none"> (1) 162961HRS (2) 23556HRS (3) 52689HRS (4) 86715HRS |
| 10 | MTBF | MIL-HDBK-217F TOTAL FAILURE RATE : 209.4 KHRS | |
| 11 | DMTBF/Accelerated Life Test | Demonstration Mean Time Between Failure (Expected Life): Above 30,000 hours @ TA 50°C | |

| TEST RESULT | TESTER | REVIEW | APPROVAL |
|-------------|--------|--------|----------|
| PASS | FRANK | GESG | WANGDZ |

12.10.30 A50-F031