



Test Report: HDR-150-48

150W Ultra Slim Step Shape DIN Rail

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

Control Function Test

Component Stress Test

■ SAFETY & E.M.C. TEST

Safety Test

E.M.C. Test

■ RELIABILITY TEST

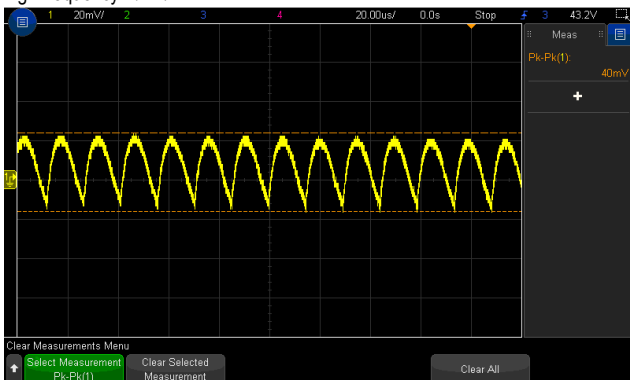
ENVIRONMENT TEST

DESIGN VERIFY TEST

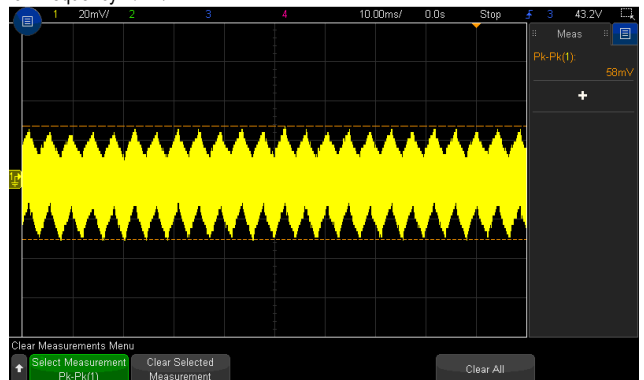
OUTPUT FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|-------------------------------|-------------------|--|-----------------------|
| 1 | OUTPUT VOLTAGE ADJUST RANGE | CH1: 43.2V~ 55.2V | I/P : 230 VAC O/P : MIN LOAD Ta : 25°C | 42.15V~56.42V /230VAC |
| 2 | OUTPUT VOLTAGE(Max) TOLERANCE | V1: -1.0%~1.0% | I/P: 85VAC /277VAC O/P:FULL/ MIN. LOAD Ta:25°C | V1 : -0.05%~0.05% |
| 3 | LINE REGULATION (Max) | V1: -1.0%~ 1.0% | I/P: 85VAC~ 277VAC O/P:FULL LOAD Ta:25°C | V1 : -0.00%~0.02% |
| 4 | LOAD REGULATION(Max) | V1: -1.0%~1.0% | I/P: 230VAC O/P:FULL ~MIN LOAD Ta:25°C | V1 : -0.05%~0.05% |
| 5 | OVER/UNDERSHOOT TEST | < ±5% | I/P: 230VAC O/P:FULL LOAD Ta:25°C | 1.2% |
| 6 | RIPPLE & NOISE(Max) | V1: 200mVp-p | I/P:230VAC O/P:FULL LOAD Ta:25°C | V1: 58mVp-p |

high frequency (V1) :



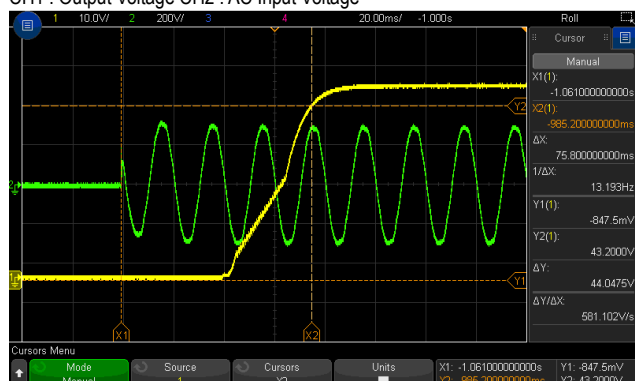
low frequency (V1) :



| | | | | |
|---|------------------|------------------------------|--|-----------------------------------|
| 7 | SET UP TIME(Max) | 230VAC/500ms 115VAC/500ms | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | 230VAC/ 75.8 ms 115VAC/ 86.2ms |
|---|------------------|------------------------------|--|-----------------------------------|

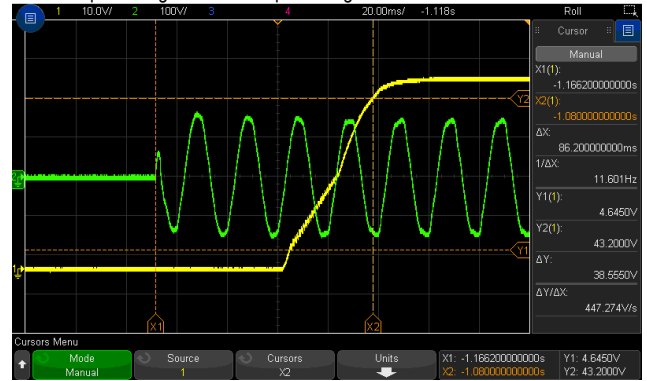
INPUT=230VAC/50HZ @ FULL LOAD

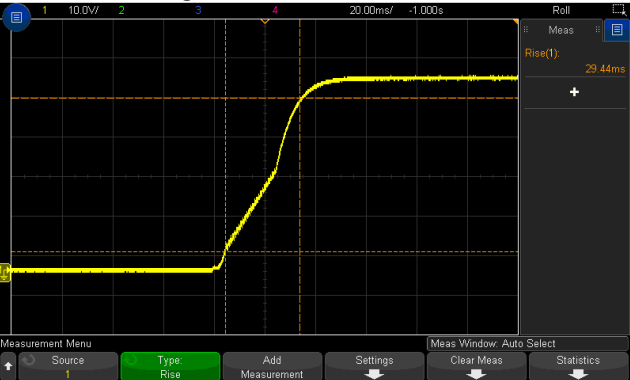
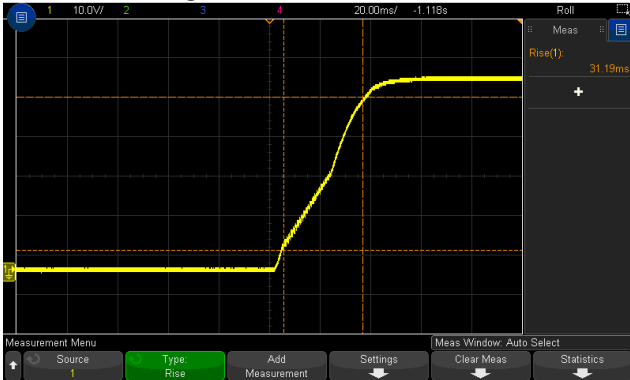
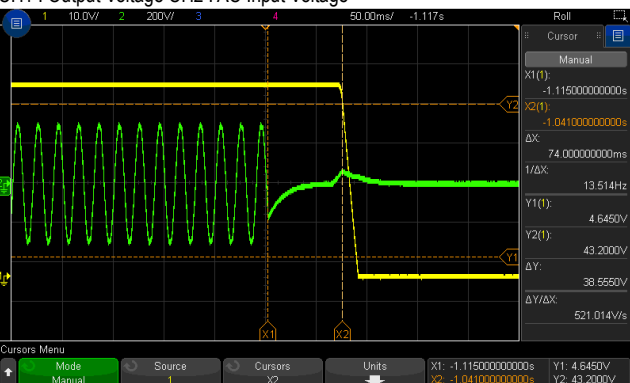
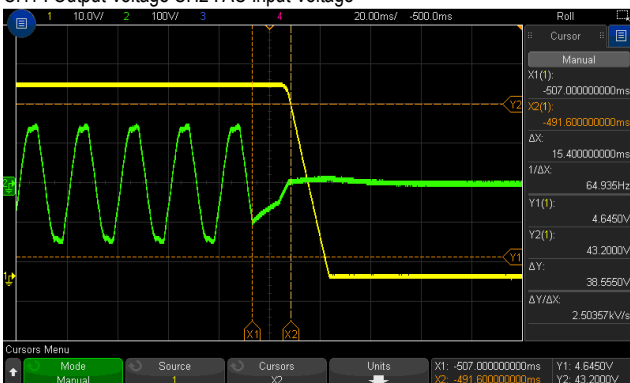
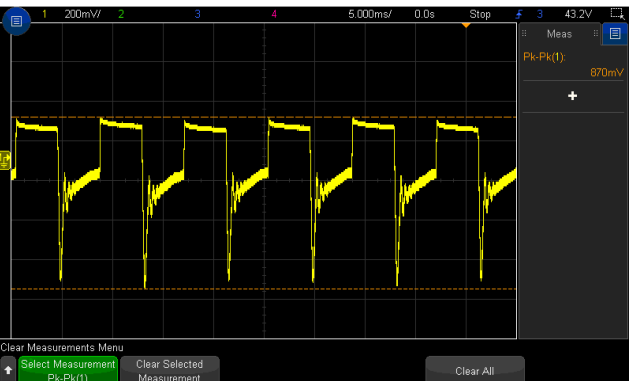

CH1 : Output Voltage CH2 : AC Input Voltage



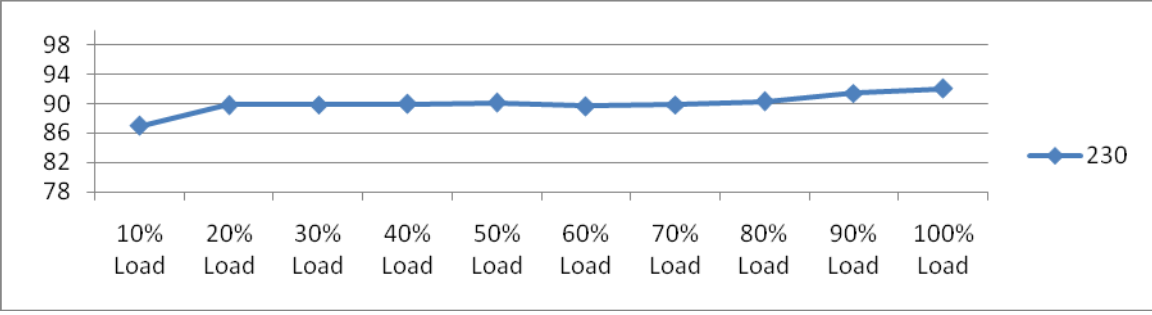
INPUT=115VAC/60HZ @ FULL LOAD

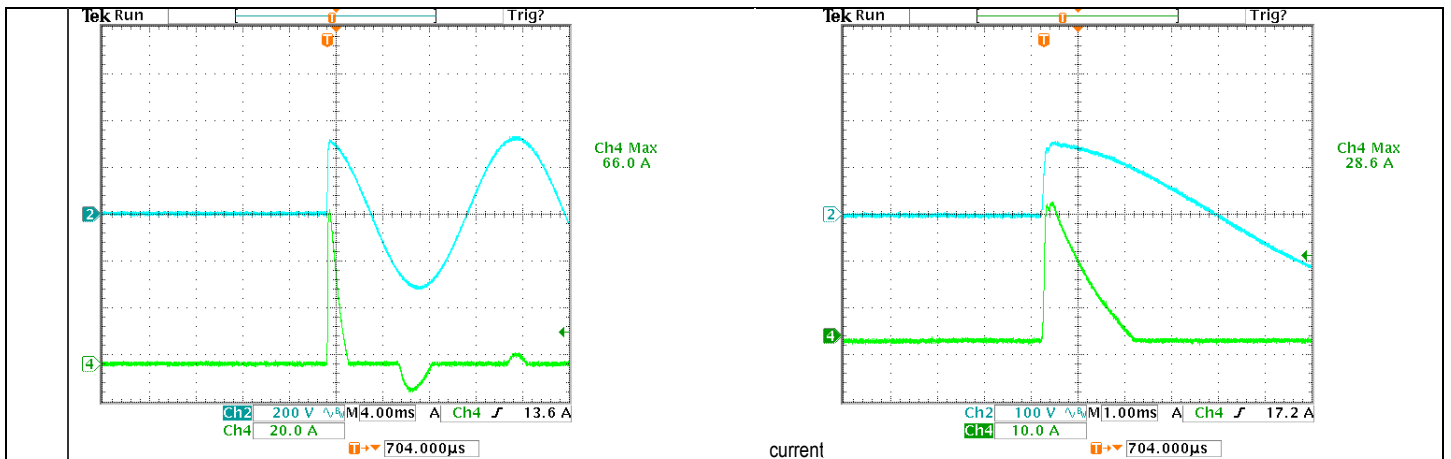
CH1 : Output Voltage CH2 : AC Input Voltage



| | | | |
|--|----------------------------|---|--|
| 8 RISE TIME (Max) | 230VAC/60ms 115VAC/60ms | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | 230VAC/ 29.44ms 115VAC/ 31.19ms |
| INPUT=230VAC/50HZ @ FULL LOAD  | | INPUT=115VAC/60HZ @ FULL LOAD  | |
| 9 HOLD UP TIME (Typ.) | 230VAC/30ms 115VAC/12ms | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | 230VAC/ 74.0ms 115VAC/ 15.4ms |
| INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage  | | INPUT=115VAC/60HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage  | |
| 10 DYNAMIC LOAD | V1: 4800 mVp-p | I/P: 230VAC O/P: (1)FULL /50% LOAD 50%DUTY / 120HZ (2)FULL /50% LOAD 50%DUTY / 1KHZ Ta:25°C | (1) (2) V1: 870mVp-p 830mVp-p |
| FULL /50% LOAD 50%DUTY / 120HZ (V1)  | | FULL /50% LOAD 50%DUTY / 1KHZ (V1)  | |

INPUT FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | | | | | | | | | | | | | | | | | | | | | | |
|---|---------------------------|--|---|--|----------|----------------|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|------|----|
| 1 | INPUT VOLTAGE RANGE | 85VAC~277VAC 120VDC ~ 390VDC | (1) I/P:TESTING O/P:FULL LOAD (2) I/P:DC TESTING(L:+ N:-) O/P: FULL / 50% LOAD (3) I/P:DC TESTING(L:- N:+) O/P: FULL / 50% LOAD Ta:25°C | (1) 75V~277V (2) 106.89Vdc~390Vdc/FULL LOAD 106.88Vdc~390Vdc/50% LOAD (3) 106.89Vdc~390Vdc/FULL LOAD 106.89Vdc~390Vdc/50% LOAD | | | | | | | | | | | | | | | | | | | | | | |
| | | | 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:85VAC ~277 VAC O/P:FULL~MIN LOAD Ta:25°C | TEST: OK | | | | | | | | | | | | | | | | | | | | | | |
| 3 | INPUT CURRENT (Typ.) | 230V/ 1.6A 115V/ 3.0A | I/P : 230 VAC I/P : 115 VAC O/P : FULL LOAD Ta : 25°C | I =1.20A/ 230VAC I =2.06A/ 115VAC | | | | | | | | | | | | | | | | | | | | | | |
| 4 | NO LOAD POWER CONSUMPTION | < 0.3W | I/P : 230 VAC O/P : Min LOAD Ta : 25°C | 0.2W | | | | | | | | | | | | | | | | | | | | | | |
| 5 | EFFICIENCY(Typ.) | 90.5% | I/P:230 VAC O/P:FULL LOAD Ta:25°C | 91.99% | | | | | | | | | | | | | | | | | | | | | | |
| <p>EFFICIENCY vs LOAD</p>  <table border="1"> <caption>Efficiency vs Load Data (Approximate)</caption> <thead> <tr> <th>Load (%)</th> <th>Efficiency (%)</th> </tr> </thead> <tbody> <tr><td>10%</td><td>86</td></tr> <tr><td>20%</td><td>90</td></tr> <tr><td>30%</td><td>90</td></tr> <tr><td>40%</td><td>90</td></tr> <tr><td>50%</td><td>90</td></tr> <tr><td>60%</td><td>90</td></tr> <tr><td>70%</td><td>90</td></tr> <tr><td>80%</td><td>90</td></tr> <tr><td>90%</td><td>91</td></tr> <tr><td>100%</td><td>91</td></tr> </tbody> </table> | | | | | Load (%) | Efficiency (%) | 10% | 86 | 20% | 90 | 30% | 90 | 40% | 90 | 50% | 90 | 60% | 90 | 70% | 90 | 80% | 90 | 90% | 91 | 100% | 91 |
| Load (%) | Efficiency (%) | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10% | 86 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20% | 90 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30% | 90 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40% | 90 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50% | 90 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60% | 90 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 70% | 90 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 80% | 90 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 90% | 91 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100% | 91 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | INRUSH CURRENT(Typ.) | 230V / 70A 115V / 35A COLD START | I/P : 230 VAC O/P : FULL LOAD Ta : 25°C | I =66.0A/ 230VAC I =28.6A/ 230VAC | | | | | | | | | | | | | | | | | | | | | | |
| | | | INPUT=230VAC/50HZ @ FULL LOAD CH2 : AC Input Voltage CH4 : Input current | INPUT=115VAC/50HZ @ FULL LOAD CH2 : AC Input Voltage CH4 : Input | | | | | | | | | | | | | | | | | | | | | | |



PROTECTION FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|-------------------------|--|--|---|
| 1 | OVER LOAD PROTECTION | 105%~135% | I/P: 277VAC I/P: 230VAC I/P: 115VAC O/P: TESTING Ta:25°C | 117.81%/ 277VAC 118.43%/ 230VAC 118.43%/88VAC PROTECTION TYPE : Hiccup mode when output voltage < 50%, recovers automatically after fault condition is removed; Constant current limiting within 50%~100% rated output voltage, recovers automatically after fault condition is removed |
| 2 | OVER VOLTAGE PROTECTION | 56.5V~64.8V | I/P: 277VAC I/P: 230VAC I/P: 85VAC O/P: MIN LOAD Ta:25°C | 60.4V/ 277VAC 60.4V/ 230VAC 60.4V/ 88VAC PROTECTION TYPE : Shut down o/p voltage, repower on to recover |
| 3 | SHORT PROTECTION | SHORT EVERY OUTPUT 1 HOUR NO DAMAGE | I/P: 277VAC I/P: 85VAC 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 | Q4 Rated : 650 V | AC ON/OFF I/P: High-Line +3V =280V VDS: O/P: (1) Full Load (2) Output Short (3) Full Load Continue Ta:25°C | VDS: (1) 511V (2) 471V (3) 511V |
| 2 | O/P MOFET | Q100 Rated : 300 V | AC ON/OFF I/P: High-Line +3V =280 V O/P: (1) Full Load (2) Output Short (3) Full Load Continue Ta:25°C | D55 (1) 256V (2) 211V (3) 256V |

| | | | | |
|---|--------------------------|--------------------------------|--|---|
| 3 | Input Capacitor Voltage | C5 Rated :120 μ / 400 V | I/P:High-Line +3V =280V O/P: (1)Full Load input on/off (2) Min load input on /Off (3)Full Load /Min load Change (4)Full load continue Ta:25°C | (1) 189V (2) 185V (3) 185V (4) 183 V |
| 4 | Control IC Voltage Test | U1 Rated : 0V~ 35 V | AC ON/OFF I/P:High-Line +3V =280 V O/P(1)FULL LOAD (2) Output Short (3)O.L.P (4)O.V.P. (5)NO LOAD VRmin(LOW LINE) Ta:25°C | U1 (1) 20.2V (2) 12.3V (3) 20.2V (4) 20.0V (5) 19.8V |
| 5 | Clamp Diode Peak Voltage | D10 Rated : 1000 V | AC ON/OFF I/P : High-Line +3V = 280 V O/P : (1) Dynamic Load 90%Duty/1KHz (2)Full load continue Ta : 25°C | (1) 481V (2) 481V |

SAFETY TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|----------------------|------------------------------|----------------------------------|--------------------------------------|
| 1 | WITHSTAND VOLTAGE | I/P-O/P: 4KVAC/min | I/P-O/P: 4.4 KVAC/min Ta:25°C | I/P-O/P:1.41mA NO DAMAGE |
| 2 | ISOLATION RESISTANCE | I/P-O/P:500VDC>100M Ω | I/P-O/P: 600 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 | BS EN/EN61000-3-2 CLASS A | I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C | <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL |
| 2 | CONDUCTION | BS EN/EN55032(CISPR32) CLASS B | I/P : 230 VAC (50HZ) O/P : FULL/50% LOAD Ta : 25°C | PASS Test by certified Lab |
| 3 | RADIATION | BS EN/EN55032(CISPR32) CLASS B | I/P : 230 VAC (50HZ) O/P : FULL LOAD Ta : 25°C | PASS Test by certified Lab |
| 4 | E.S.D | BS EN/EN61000-4-2 <input type="checkbox"/> LIGHT INDUSTRY AIR: 8KV / Contact: 4KV | I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C | CRITERIA A |

| | | | | |
|---|--|--|--|------------|
| | | <input checked="" type="checkbox"/> INDUSTRY AIR: 8KV / Contact: 4KV <input type="checkbox"/> Din rail Model : AIR: 15KV / Contact: 8KV | | |
| 5 | E.F.T | BS EN/EN61000-4-4 <input type="checkbox"/> LIGHT INDUSTRY INPUT : 1KV <input type="checkbox"/> MEDICAL <input checked="" type="checkbox"/> INDUSTRY INPUT : 2KV | I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C | CRITERIA A |
| 6 | SURGE | BS EN/EN61000-4-5 INDUSTRY L-N : 2KV | I/P : 230 VAC/50HZ O/P : FULL LOAD Ta : 25°C | CRITERIA A |
| 7 | Test by certified Lab & Test Report Prepare Any contradictions of the test results, please refer to the latest EMC test report. | | | |

RELIABILITY TEST

ENVIRONMENT TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|------------------------|---|---|-----------|---------------------|---------------------|---|----|--------|--------|---|-----|--------|--------|---|-----|--------|--------|---|-----|--------|--------|---|----|--------|--------|---|----|--------|--------|---|------|--------|--------|---|-----|--------|--------|---|--------|--------|---------|----|----|--------|---------|----|------|--------|--------|----|------|--------|--------|----|-----|--------|--------|----|----|--------|---------|----|------|--------|--------|----|------|--------|--------|--|--|
| 1 | TEMPERATURE RISE TEST | MODEL : HDR-150-48 1. ROOM AMBIENT BURN-IN : 1 HRS I/P : 230VAC O/P : FULL LOAD Ta= 24.5 °C 2. HIGH AMBIENT BURN-IN : 1 HRS I/P : 230VAC O/P : FULL LOAD Ta= 45.3 °C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>ROOM AMBIENT Ta= °C</th> <th>HIGH AMBIENT Ta= °C</th> </tr> </thead> <tbody> <tr><td>1</td><td>U1</td><td>76.7°C</td><td>92.0°C</td></tr> <tr><td>2</td><td>LF1</td><td>47.6°C</td><td>65.9°C</td></tr> <tr><td>3</td><td>LF2</td><td>64.3°C</td><td>78.0°C</td></tr> <tr><td>4</td><td>BD1</td><td>75.8°C</td><td>90.5°C</td></tr> <tr><td>5</td><td>T2</td><td>68.3°C</td><td>88.2°C</td></tr> <tr><td>6</td><td>C5</td><td>62.0°C</td><td>80.0°C</td></tr> <tr><td>7</td><td>RTH2</td><td>77.3°C</td><td>94.2°C</td></tr> <tr><td>8</td><td>C10</td><td>74.3°C</td><td>95.0°C</td></tr> <tr><td>9</td><td>T1COIL</td><td>87.9°C</td><td>108.1°C</td></tr> <tr><td>10</td><td>Q4</td><td>87.0°C</td><td>106.0°C</td></tr> <tr><td>11</td><td>L100</td><td>56.5°C</td><td>76.2°C</td></tr> <tr><td>12</td><td>Q100</td><td>69.1°C</td><td>88.6°C</td></tr> <tr><td>13</td><td>D10</td><td>73.3°C</td><td>95.7°C</td></tr> <tr><td>14</td><td>R1</td><td>87.3°C</td><td>101.2°C</td></tr> <tr><td>15</td><td>C103</td><td>62.7°C</td><td>83.7°C</td></tr> <tr><td>16</td><td>C105</td><td>59.3°C</td><td>79.3°C</td></tr> </tbody> </table> | NO | Position | ROOM AMBIENT Ta= °C | HIGH AMBIENT Ta= °C | 1 | U1 | 76.7°C | 92.0°C | 2 | LF1 | 47.6°C | 65.9°C | 3 | LF2 | 64.3°C | 78.0°C | 4 | BD1 | 75.8°C | 90.5°C | 5 | T2 | 68.3°C | 88.2°C | 6 | C5 | 62.0°C | 80.0°C | 7 | RTH2 | 77.3°C | 94.2°C | 8 | C10 | 74.3°C | 95.0°C | 9 | T1COIL | 87.9°C | 108.1°C | 10 | Q4 | 87.0°C | 106.0°C | 11 | L100 | 56.5°C | 76.2°C | 12 | Q100 | 69.1°C | 88.6°C | 13 | D10 | 73.3°C | 95.7°C | 14 | R1 | 87.3°C | 101.2°C | 15 | C103 | 62.7°C | 83.7°C | 16 | C105 | 59.3°C | 79.3°C | | |
| NO | Position | ROOM AMBIENT Ta= °C | HIGH AMBIENT Ta= °C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | U1 | 76.7°C | 92.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | LF1 | 47.6°C | 65.9°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | LF2 | 64.3°C | 78.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | BD1 | 75.8°C | 90.5°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | T2 | 68.3°C | 88.2°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | C5 | 62.0°C | 80.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | RTH2 | 77.3°C | 94.2°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | C10 | 74.3°C | 95.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | T1COIL | 87.9°C | 108.1°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Q4 | 87.0°C | 106.0°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | L100 | 56.5°C | 76.2°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Q100 | 69.1°C | 88.6°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | D10 | 73.3°C | 95.7°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | R1 | 87.3°C | 101.2°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | C103 | 62.7°C | 83.7°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | C105 | 59.3°C | 79.3°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | OVER LOAD BURN-IN TEST | NO DAMAGE 1 HOUR (MIN) | I/P : 230 VAC O/P : 120% LOAD Ta : 25°C | TEST : OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



| 3 | LOW TEMPERATURE TURN ON TEST | TURN ON AFTER 2 HOUR | I/P : 277VAC/100VAC O/P : 100 % LOAD Ta= -30 °C | TEST : OK | | | | | | | | | | | | |
|-------------------------|---|--|--|--|--------------|--------------|-------------------------|---------|-------|-----------------|-------|------|------------|---------------------|--|-----------|
| 4 | HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST | AFTER 12 HOURS IN CHAMBER ON CONTROL 45 °C /95 %R.H NO DAMAGE | I/P : 285 VAC O/P : FULL LOAD Ta= 45 °C HUMIDITY= 95 %R.H | TEST : OK | | | | | | | | | | | | |
| 5 | TEMPERATURE COEFFICIENT | ± 0.03 %/°C (0~45°C) | I/P : 230 VAC O/P : FULL LOAD | ± 0.0102 %/°C (0~45°C) | | | | | | | | | | | | |
| 6 | STORAGE TEMPERATURE TEST | 1. Thermal shock Temperature : -45°C~ +90°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 10 CYCLE 5. Input/Output condition : STATIC | | TEST : OK | | | | | | | | | | | | |
| 7 | THERMAL SHOCK TEST | 1. Thermal shock Temperature : -35°C~ +50°C 2. Temperature change rate : 25°C / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle : 16 CYCLE 5. Input/Output condition : 15cycle:230V/ FULL LOAD AC ON 3sec/AC OFF 1sec TEST 1cycle:230V/ FULL LOAD Burn In Test | | TEST : OK | | | | | | | | | | | | |
| 8 | VIBRATION TEST | 1 Carton & 1 Set (1) Waveform : Sine Wave (2) Frequency : 10~500Hz (3) Sweep Time : 10min/sweep cycle (4) Acceleration : 3G (5) Test Time : 180min in each axis (X.Y.Z) (6) Ta : 25°C 2 Din Rail <table border="1" style="margin-left: 20px;"> <thead> <tr> <th></th> <th>Displacement</th> <th>Acceleration</th> </tr> </thead> <tbody> <tr> <td>2 (+3/-0) Hz up to 15Hz</td> <td>± 2.5mm</td> <td>-----</td> </tr> <tr> <td>15Hz up to 50Hz</td> <td>-----</td> <td>2.3g</td> </tr> <tr> <td>Sweep rate</td> <td colspan="2">Max 1 Octave/minute</td> </tr> </tbody> </table> | | | Displacement | Acceleration | 2 (+3/-0) Hz up to 15Hz | ± 2.5mm | ----- | 15Hz up to 50Hz | ----- | 2.3g | Sweep rate | Max 1 Octave/minute | | TEST : OK |
| | Displacement | Acceleration | | | | | | | | | | | | | | |
| 2 (+3/-0) Hz up to 15Hz | ± 2.5mm | ----- | | | | | | | | | | | | | | |
| 15Hz up to 50Hz | ----- | 2.3g | | | | | | | | | | | | | | |
| Sweep rate | Max 1 Octave/minute | | | | | | | | | | | | | | | |
| 9 | CAPACITOR LIFE CYCLE | SUPPOSE C103 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= 45 °C LIFE TIME (3) I/P : 230VAC O/P : 75% LOAD Ta= 45 °C LIFE TIME (4) I/P : 230VAC O/P : 50% LOAD Ta= 45 °C LIFE TIME | | (1) 176531.8 HRS (2) 43524.4 HRS (3) 81896.1 HRS (4) 145527.5 HRS | | | | | | | | | | | | |
| 10 | MTBF | 3046.3K hrs min. Telcordia SR-332 (Bellcore) ; 535.9K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | | | | | | | |
| 11 | Ongoing Reliability Test | I/P : 230VAC O/P : FULL LOAD TA=50°C Demonstration Mean Time Between Failure : 30,000 hours | | | | | | | | | | | | | | |

| TEST RESULT | TESTER | REVIEW | APPROVAL |
|-------------|--------|--------|----------|
| PASS | LIUTT | | WANGDZ |

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