



# Test Report: EDR-150-24

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150W Single Output Industrial DIN RAIL

## ■ 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

MODEL : EDR-150-24

DVT 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: 60.2mVp-p (Max)                          | P       |
| 2  | OUTPUT VOLTAGE<br>ADJUST RANGE | CH1: 24 V~28 V                             | I/P: 230VAC/115VAC<br>O/P: MIN LOAD<br>Ta: 25°C   | 23.17V~28.61V/230VAC<br>23.17V~28.61V/115VAC | P       |
| 3  | OUTPUT VOLTAGE<br>TOLERANCE    | V1: 1%~ -1% (Max)                          | I/P: 100VAC /264VAC<br>O/P: FULL/ MIN. LOAD<br>Ta: 25°C   | V1: 0.074%~ -0.074%                          | P       |
| 4  | LINE REGULATION                | V1: 0.5%~ -0.5% (Max)                      | I/P: 100VAC~264VAC<br>O/P: FULL LOAD<br>Ta: 25°C  | V1: 0%~ -0.025%                              | P       |
| 5  | LOAD REGULATION                | V1: 1%~ -1% (Max)                          | I/P: 230VAC<br>O/P: FULL ~MIN LOAD<br>Ta: 25°C  | V1: 0.074%~ -0.074%                          | P       |
| 6  | SET UP TIME                    | 230VAC/1500ms (Max)<br>115VAC/3000ms (Max) | I/P: 230VAC/115VAC<br>O/P: FULL LOAD<br>Ta: 25°C  | 230VAC/721.124ms<br>115VAC/1563.862ms        | P       |
| 7  | RISE TIME                      | 230VAC/60ms (Max)<br>115VAC/60ms (Max)     | I/P: 230VAC/115VAC<br>O/P: FULL LOAD<br>Ta: 25°C  | 230VAC/24.069ms<br>115VAC/11.229ms           | P       |
| 8  | HOLD UP TIME                   | 230VAC/16ms (TYP.)<br>115VAC/10ms (TYP.)   | I/P: 230VAC/115VAC<br>O/P: FULL LOAD<br>Ta: 25°C  | 230VAC/44.356ms<br>115VAC/11.845ms           | P       |
| 9  | OVER/UNDERSHOOT TEST           | < ±5%                                      | I/P: 230VAC<br>O/P: FULL LOAD<br>Ta: 25°C   | <5%  | P       |
| 10 | DYNAMIC LOAD                   | V1: 2400 mVp-p                             | I/P: 230VAC<br>O/P: (1) FULL /Min LOAD<br>90%DUTY/1KHZ<br>(2) (1) FULL /Min LOAD<br>90%DUTY/3KHZ<br>(3) FULL /Min LOAD<br>90%DUTY/5KHZ<br>(4) FULL /Min LOAD<br>50%DUTY/120HZ<br>Ta: 25°C | 250mVp-p<br>206mVp-p<br>198mVp-p<br>338mVp-p | P       |

### INPUT FUNCTION TEST



# 150W Single Output Industrial DIN RAIL EDR-150 series

| NO | TEST ITEM             | SPECIFICATION                                  | TEST CONDITION  | RESULT  | VERDICT |
|----|-----------------------|--|---|---|---------|
| 1  | INPUT VOLTAGE RANGE   | 90VAC~264VAC<br>127VDC ~ 370VDC                | (1) I/P: TESTING<br>O/P: FULL LOAD<br>(2) I/P: DC TESTING(L: + N: -)<br>O/P: FULL / 50% LOAD<br>(3) I/P: DC TESTING(L: - N: +)<br>O/P: FULL / 50% LOAD<br>Ta: 25°C  | (1) 69.656 V~264V<br>(2) 115.08Vdc~370Vdc/FULL LOAD<br>115.07Vdc~370Vdc/50% LOAD<br>(3) 115.07Vdc~370Vdc/FULL LOAD<br>115.08Vdc~370Vdc/50% LOAD | P       |
|    |                       |  | I/P:<br>(1) LOW-LINE-3V=87 V<br>HIGH-LINE+15%=300 V<br>O/P: FULL/MIN LOAD<br>ON: 30 Sec OFF: 30 Sec 10MIN<br>(2) 230Vac<br>ON: 0.5 Sec OFF: 0.5 Sec 20MIN<br>(3) 230Vac<br>ON: 3Sec OFF: 3Sec 12HOURS<br>(POWER ON/OFF NO DAMAGE) | TEST: OK  |         |
| 2  | INPUT FREQUENCY RANGE | 47HZ ~63 HZ<br>NO DAMAGE OSC                   | I/P: 100 VAC ~264 VAC<br>O/P: FULL~MIN LOAD<br>Ta: 25°C   | TEST: OK  | P       |
| 4  | EFFICIENCY            | 87% (TYP)                                      | I/P: 230 VAC<br>O/P: FULL LOAD<br>Ta: 25°C  | 89.22%  | P       |
| 5  | INPUT CURRENT         | 230V/ 1.7A (Typ)<br>115V/ 2.6 A (Typ)          | I/P: 230 VAC/115VAC<br>O/P: FULL LOAD<br>Ta: 25°C   | I = 1.317A/ 230VAC<br>I = 2.177A/ 115VAC  | P       |
| 6  | INRUSH CURRENT        | 230V/35A (Typ)<br>115V/20A (Typ)<br>COLD START | I/P: 230VAC/115VAC<br>O/P: FULL LOAD<br>Ta: 25°C  | I = 33.671A/ 230VAC<br>I = 17.328A/115VAC   | P       |

## PROTECTION FUNCTION TEST

| NO | TEST ITEM                   | SPECIFICATION   | TEST CONDITION  | RESULT  | VERDICT |
|----|-----------------------------|---|---|---|---------|
| 1  | OVER LOAD PROTECTION        | 105%~130% rated output power<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed / 230VAC<br><br>105 ~ 150% rated output power<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed / 115VAC | I/P: 264VAC<br>I/P: 230VAC<br>I/P: 100VAC<br>O/P: TESTING<br>Ta: 25°C   | 111.7%/ 264VAC<br>111.7%/ 230VAC<br>110.1%/100VAC<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed / 230VAC<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed / 115VAC | P       |
| 2  | OVER VOLTAGE PROTECTION     | CH: 29V~33V(Typ)  | I I/P: 264VAC<br>I/P: 230VAC<br>I/P: 90VAC<br>O/P: MIN LOAD<br>Ta: 25°C | 30.79V/ 264VAC<br>30.69V/ 230VAC<br>30.79V/90VAC<br>Protection type : Shut down o/p voltage, re-power on to recover   | P       |
| 3  | OVER TEMPERATURE PROTECTION | NO DAMAGE   | I/P: 230 VAC<br>O/P: FULL LOAD  | O.T.P. Active<br>Shut down o/p voltage, re-power on to recover  | P       |



# 150W Single Output Industrial DIN RAIL EDR-150 series

|   |                  |  |  |   |   |
|---|------------------|--|--|---|---|
| 4 | SHORT PROTECTION | SHORT EVERY OUTPUT<br>1 HOUR NO DAMAGE | I/P: 264VAC<br>O/P: FULL LOAD<br>Ta:25°C | NO DAMAGE<br>(1)Constant Current Limiting<br>SHORT TEST MOVE Vo/p OVER<br>SHOOT<10%_OK_ | 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 | Q1 Rated<br>11 A/600 V                    | I/P:High-Line +3V =267V<br>O/P: (1)Full Load input on/off<br>(2)Output Short<br>(3) Full Load Continue<br>Ta:25°C      | (1)530V<br>(2)404V<br>(3)524V       | P       |
| 2  | Diode Peak Voltage                                    | D100 Rated<br>20A/ 150V                   | I/P:High-Line +3V =267 V<br>O/P: (1)Full Load input on/off<br>(2)Output Short<br>(3) Full Load Continue<br>Ta:25°C     | (1)122V<br>(2) 128V<br>(3)121V      | P       |
| 3  | Input Capacitor Voltage                               | C5 Rated:<br>180u / 400 V                 | I/P:High-Line +3V =267 V<br>O/P: (1)Full Load input on/off<br>(2) Min load input on /Off<br>(3)Bum-IN 1Hour<br>Ta:25°C | (1) 362V<br>(2) 362V<br>(3) 360V    | P       |
| 4  | Control IC Voltage Test                               | PWM IC U1 Rated<br>28 V(MAX)<br>9 V(MIN.) | I/P:High-Line +3V =267 V<br>O/P:(1)FULL LOAD<br>(2) Output Short<br>(3)NO LOAD VR 下限.LOW<br>LINE<br>Ta:25°C            | (2) 17.2V<br>(3) 16.9V<br>(4) 16.9V | P       |

## SAFETY TEST

| NO | TEST ITEM            | SPECIFICATION  | TEST CONDITION  | RESULT   | VERDICT |
|----|----------------------|--|---|--|---------|
| 1  | WITHSTAND VOLTAGE    | EN 60950<br>I/P-O/P: 3KVAC/min<br>I/P-FG: 2 KVAC/min<br>O/P-FG:0.5KVAC/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:3.253mA<br>I/P-FG:4.55mA<br>O/P-FG:4.03m A<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               | I/P-O/P: 9999MΩ<br>I/P-FG: 9999MΩ<br>O/P-FG: 9999MΩ<br>NO DAMAGE | P       |
| 3  | GROUNDING CONTINUITY | EN 60950<br>FG(PE) TO CHASSIS<br>OR TRACE < 100 mΩ                         | 40A / 2min<br>Ta:25°C   | 14mΩ BY CASE   | P       |
| 4  | LEAKAGE CURRENT      | EN 60950<br>1mA< 240VAC  | I/P:264 VAC<br>O/P:Min LOAD<br>Ta:25°C  | L-FG: 0.46mA<br>N-FG: 0.46mA                                     | P       |

## E.M.C TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|----|-----------|---------------|----------------|--------|---------|
|----|-----------|---------------|----------------|--------|---------|



# 150W Single Output Industrial DIN RAIL EDR-150 series

|   |          |   |   |            |   |
|---|----------|---|---|------------|---|
| 1 | HARMONIC | BS EN/EN61000-3-2<br>CLASS A                            | I/P:230VAC/50HZ<br>O/P:80%LOAD<br>Ta:25°C     | PASS       | P |
| 2 | E.S.D    | BS EN/EN61000-4-2<br>INDUSTRY<br>AIR:8KV / Contact:4KV  | I/P: 230 VAC/50HZ<br>O/P:FULL LOAD<br>Ta:25°C | CRITERIA A | P |
| 3 | E.F.T    | BS EN/EN61000-4-4<br>INDUSTRY<br>INPUT: 2KV             | I/P: 230VAC/50HZ<br>O/P:FULL LOAD<br>Ta:25°C  | CRITERIA A | P |
| 4 | SURGE    | BS EN/EN61000-4-5<br>INDUSTRY<br>L-N :2KV<br>L,N-PE:4KV | I/P: 230VAC/50HZ<br>O/P:FULL LOAD<br>Ta:25°C  | CRITERIA A | P |

## RELIABILITY TEST

### ENVIRONMENT TEST

| NO | TEST ITEM                       | SPECIFICATION   | TEST CONDITION  | RESULT    | VERDICT  |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
|----|---------------------------------|---|---|-----------|----------|---------------------------|---------------------------|---|----|--------|--------|---|------|--------|--------|---|-----|--------|--------|---|----|--------|--------|---|----|--------|--------|---|----|---------|---------|---|----|--------|---------|---|------|--------|--------|---|------|--------|--------|----|------|--------|--------|----|-----|--------|--------|----|-----|--------|---------|----|-----|--------|--------|----|------|--------|--------|----|----|--------|--------|--|---|
| 1  | TEMPERATURE RISE TEST           | MODEL : EDR-150-24<br>1. ROOM AMBIENT BURN-IN : 1HRS<br>I/P : 230VAC O/P : FULL LOAD Ta=30.7°C<br>2. HIGH AMBIENT BURN-IN : 1 HRS<br>I/P : 230VAC O/P : FULL LOAD Ta=49.0°C | <table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>ROOM AMBIENT<br/>Ta=28.6°C</th> <th>HIGH AMBIENT<br/>Ta=51.5°C</th> </tr> </thead> <tbody> <tr><td>1</td><td>U1</td><td>62.2°C</td><td>78.4°C</td></tr> <tr><td>2</td><td>U107</td><td>60.7°C</td><td>76.8°C</td></tr> <tr><td>3</td><td>BD1</td><td>59.4°C</td><td>75.3°C</td></tr> <tr><td>4</td><td>C5</td><td>59.4°C</td><td>75.8°C</td></tr> <tr><td>5</td><td>Q1</td><td>72.8°C</td><td>90.5°C</td></tr> <tr><td>6</td><td>D5</td><td>105.3°C</td><td>124.6°C</td></tr> <tr><td>7</td><td>T1</td><td>88.2°C</td><td>104.1°C</td></tr> <tr><td>8</td><td>D100</td><td>79.7°C</td><td>95.7°C</td></tr> <tr><td>9</td><td>RTH2</td><td>76.2°C</td><td>93.0°C</td></tr> <tr><td>10</td><td>C105</td><td>55.3°C</td><td>71.5°C</td></tr> <tr><td>11</td><td>LF2</td><td>68.1°C</td><td>84.5°C</td></tr> <tr><td>12</td><td>C36</td><td>85.9°C</td><td>102.3°C</td></tr> <tr><td>13</td><td>C38</td><td>67.0°C</td><td>84.0°C</td></tr> <tr><td>14</td><td>C200</td><td>58.0°C</td><td>74.6°C</td></tr> <tr><td>15</td><td>R5</td><td>82.9°C</td><td>98.6°C</td></tr> </tbody> </table> | NO        | Position | ROOM AMBIENT<br>Ta=28.6°C | HIGH AMBIENT<br>Ta=51.5°C | 1 | U1 | 62.2°C | 78.4°C | 2 | U107 | 60.7°C | 76.8°C | 3 | BD1 | 59.4°C | 75.3°C | 4 | C5 | 59.4°C | 75.8°C | 5 | Q1 | 72.8°C | 90.5°C | 6 | D5 | 105.3°C | 124.6°C | 7 | T1 | 88.2°C | 104.1°C | 8 | D100 | 79.7°C | 95.7°C | 9 | RTH2 | 76.2°C | 93.0°C | 10 | C105 | 55.3°C | 71.5°C | 11 | LF2 | 68.1°C | 84.5°C | 12 | C36 | 85.9°C | 102.3°C | 13 | C38 | 67.0°C | 84.0°C | 14 | C200 | 58.0°C | 74.6°C | 15 | R5 | 82.9°C | 98.6°C |  | P |
| NO | Position                        | ROOM AMBIENT<br>Ta=28.6°C   | HIGH AMBIENT<br>Ta=51.5°C   |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 1  | U1                              | 62.2°C  | 78.4°C  |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 2  | U107                            | 60.7°C  | 76.8°C  |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 3  | BD1                             | 59.4°C  | 75.3°C  |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 4  | C5                              | 59.4°C  | 75.8°C  |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 5  | Q1                              | 72.8°C  | 90.5°C  |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 6  | D5                              | 105.3°C   | 124.6°C   |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 7  | T1                              | 88.2°C  | 104.1°C   |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 8  | D100                            | 79.7°C  | 95.7°C  |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 9  | RTH2                            | 76.2°C  | 93.0°C  |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 10 | C105                            | 55.3°C  | 71.5°C  |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 11 | LF2                             | 68.1°C  | 84.5°C  |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 12 | C36                             | 85.9°C  | 102.3°C   |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 13 | C38                             | 67.0°C  | 84.0°C  |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 14 | C200                            | 58.0°C  | 74.6°C  |           |          |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |
| 15 | R5                              | 82.9°C  | 98.6°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=-20°C   | TEST : OK | P        |                           |                           |   |    |        |        |   |      |        |        |   |     |        |        |   |    |        |        |   |    |        |        |   |    |         |         |   |    |        |         |   |      |        |        |   |      |        |        |    |      |        |        |    |     |        |        |    |     |        |         |    |     |        |        |    |      |        |        |    |    |        |        |  |   |



# 150W Single Output Industrial DIN RAIL **EDR-150** series

|    |   |  |  |  |   |
|----|---|--|--|--|---|
| 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%/°C (0~50°C)   | P |
| 6  | STORAGE TEMPERATURE TEST  | 1. Thermal shock Temperature : -40°C~ +85°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 : -20°C~ +60°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<br>LIFE CYCLE   | 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) 490891HRS<br>(2) 100330HRS<br>(3) 140948HRS<br>(4) 184730HRS | P |
| 10 | MTBF  | 2717.1K hrs min. Telcordia SR-332 (Bellcore) ; 472.5K hrs min. MIL-HDBK-217F (25°C)  |  |  | P |
| 11 | DMTBF/Accelerated Life Test                                       | Demonstration Mean Time Between Failure (Expected Life): Above 50,000 hours @ TA 50°C  |  |  | P |

| SAMPLE         | TESTER | APPROVAL |
|----------------|--------|----------|
| PRODUCT SAMPLE | FRANK  | WangDZ   |

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