



# Test Report : GE40I09

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40W AC-DC Interchangeable Industrial Adaptor

## ■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

## ■ SAFETY TEST

Safety Test

## ■ RELIABILITY TEST

Other test

**DESIGN VERIFY TEST**
**OUTPUT FUNCTION TEST**

| NO | TEST ITEM         | SPECIFICATION       | TEST CONDITION                                    | RESULT          |
|----|-------------------|---------------------|---|-----------------|
| 1  | RIPPLE & NOISE    | 100mVp-p (Max)      | I/P:230VAC<br>O/P:FULL LOAD<br>Ta:25°C            | 15 mVp-p        |
| 2  | VOLTAGE TOLERANCE | -3% ~ +3% (Max)     | I/P:90VAC~264VAC<br>O/P:FULL~MIN. LOAD<br>Ta:25°C | -2.15% ~ -0.30% |
| 3  | LINE REGULATION   | -1.0% ~ +1.0% (Max) | I/P:90VAC ~264VAC<br>O/P:FULL LOAD<br>Ta:25°C     | +0.18% ~ -0.03% |
| 4  | LOAD REGULATION   | -3% ~ +3 (Max)      | I/P:230VAC<br>O/P:FULL ~MIN LOAD<br>Ta:25°C       | -0.91% ~ +0.97% |
| 5  | SET UP TIME       | 3000 mS             | I/P:230VAC<br>O/P:FULL LOAD<br>Ta:25°C            | 806.26 mS       |
| 6  | RISE TIME         | 40 mS               | I/P:230VAC<br>O/P:FULL LOAD<br>Ta:25°C            | 7.479 mS        |
| 7  | HOLD UP TIME      | 12 mS (Min)         | I/P:115VAC<br>O/P:FULL LOAD<br>Ta:25°C            | 18.47 mS        |

**INPUT FUNCTION TEST**

| NO | TEST ITEM                 | SPECIFICATION                           | TEST CONDITION   | RESULT                             |
|----|---------------------------|---|--|------------------------------------|
| 1  | VOLTAGE RANGE             | 90VAC ~ 264VAC                          | I/P:TESTING<br>O/P:FULL LOAD<br>Ta:25°C                      | 67V ~ 264V                         |
| 2  | FREQUENCY RANGE           | 50HZ - 60HZ (Typ)<br>NO DAMAGE OSC      | I/P: 100VAC ~ 240VAC<br>O/P:FULL~MIN LOAD<br>Ta:25°C         | TEST: OK                           |
| 3  | EFFICIENCY                | 86%                                     | I/P:230VAC<br>O/P:FULL LOAD<br>Ta:25°C                       | 86.68%                             |
| 4  | AVERAGE EFFICIENCY        | 86.94% ( LEVEL VI)<br>87.69% ( LEVEL 5) | I/P:115/230VAC<br>O/P:25% 、 50% 、 75% 、 100% LOAD<br>Ta:25°C | 88.25% (115VAC)<br>88.18% (230VAC) |
| 5  | AC CURRENT                | 1.0A (Max)                              | I/P: 100VAC<br>O/P:FULL LOAD<br>Ta:25°C                      | 0.566A                             |
| 6  | NO LOAD POWER CONSUMPTION | < 0.075W (Max)                          | I/P:230VAC<br>O/P: NO LOAD<br>Ta:25°C                        | 0.0468W                            |
| 7  | INRUSH CURRENT            | <70A<br>COLD START                      | I/P:230VAC<br>O/P:FULL LOAD<br>Ta:25°C                       | 60.812A                            |
| 8  | LEAKAGE CURRENT           | < 0.25mA                                | I/P:240VAC<br>O/P:Min LOAD<br>Ta:25°C                        | L-FG: 0.02mA<br>N-FG: 0.02mA       |

### PROTECTION FUNCTION TEST

| NO | TEST ITEM               | SPECICATION                      | TEST CONDITION                         | RESULT   |
|----|-------------------------|----------------------------------|--|--|
| 1  | OVER LOAD PROTECTION    | 110% ~ 200%                      | I/P:230VAC<br>O/P:TESTING<br>Ta:25°C   | 129.7%<br>HICCUP MODE<br>RESET : AUTO RECOVER  |
| 2  | OVER VOLTAGE PROTECTION | 115 ~ 135%                       | I/P:230VAC<br>O/P:MIN LOAD<br>Ta:25°C  | Clamp by ZENER diode                           |
| 3  | SHORT PROTECTION        | SHORT OUTPUT<br>1 HOUR NO DAMAGE | I/P:264VAC<br>O/P:FULL LOAD<br>Ta:25°C | NO DAMAGE<br>HICCUP MODE<br>RESET AUTO RECOVER |

### ■ SAFETY TEST

#### SAFETY TEST

| NO | TEST ITEM            | SPECICATION          | TEST CONDITION                  | RESULT                       |
|----|----------------------|----------------------|---------------------------------|------------------------------|
| 1  | WITHSTAND VOLTAGE    | I/P-O/P:4242 VDC/min | I/P-O/P:4242 VDC/min<br>Ta:25°C | I/P-O/P: 0.03uA<br>NO DAMAGE |
| 2  | ISOLATION RESISTANCE | I/P-O/P:500VDC>100MΩ | I/P-O/P:500 VDC<br>Ta:25°C      | I/P-O/P>100MΩ<br>NO DAMAGE   |

#### OTHER

| NO | TEST ITEM | SPECICATION  | TEST CONDITION | RESULT |
|----|-----------|--|----------------|--------|
| 1  | MTBF      | MIL-KDBK-217F NOTICES 2 PARTS COUNT<br>TOTAL FAILURE RATE : 2.363<br>M.T.B.F : 423,115.296 HRS |                |        |

| TEST RESULT | TESTER       | APPROVAL    |
|-------------|--------------|-------------|
| PASS        | ARCHEN HSIAO | PETER CHENG |