



TEST REPORT

MODEL NAME : UP100S12W2S

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1. DESIGN VERIFY TEST

1-1. INPUT FUNCTION TEST

| TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|-----------------|--------------------------|--|-------------|---------|
| VOLTAGE RANGE | 180~264VAC | I/P: testing O/P:full load Ta:25 °C | test ok | P |
| FREQUENCY RANGE | 47~63Hz no damage osc | I/P:200~240VAC O/P:full~min. load Ta:25 °C | test ok | P |
| EFFICIENCY | 85% typ. | I/P:220VAC O/P:full load Ta:25 °C | 86.7% | P |
| AC CURRENT | 0.6A/220VAC typ. | I/P:220VAC O/P:full load Ta:25 °C | 0.6A/220VAC | P |
| INRUSH CURRENT | 45A typ. cold start | I/P:220VAC O/P:full load Ta:25 °C | 47A | P |
| LEAKAGE CURRENT | 2mA max. | I/P:230VAC O/P:min. load Ta:25 °C | <2mA | P |

1-2. OUTPUT FUNCTION TEST

| TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|-------------------|--------------------|---|---------------|---------|
| RIPPLE&NOISE | 220mVp-p max. | I/P:220VAC O/P:full load Ta:25 °C | 144mVp-p max. | P |
| VOLTAGE TOLERANCE | 12V± 3% | I/P:180VAC/264VAC O/P:full/min. load Ta:25 °C | ± 1.61% | P |
| LINE REGULATION | 12V± 1% | I/P:180~264VAC O/P:full load Ta:25 °C | ± 0.1% | P |
| LOAD REGULATION | 12V± 2% | I/P:220VAC O/P:full~min. load Ta:25 °C | ± 1.61% | P |
| SETUP TIME | 3000ms/220VAC max. | I/P:220VAC O/P:full load Ta:25 °C | 600ms/220VAC | P |

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|---------------------|-------------------|--------------------------------------|-------------|----------|
| RISE TIME | 100ms/220VAC max. | I/P:220VAC O/P:full load Ta:25 | 22ms/220VAC | P |
| HOLD UP TIME | 25ms/220VAC typ. | I/P:220VAC O/P:full load Ta:25 | 24ms/220VAC | P |

1-3. PROTECTION FUNCTION TEST

| TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|--------------------------------|--|---|---|----------|
| SHORT PROTECTION | short every output 1 hour no damage | I/P:240VAC O/P:full load Ta:25 °C | no damage, recovers automatically after fault removed | P |
| OVER LOAD PROTECTION | 110% min. | I/P:220VAC O/P:testing Ta:25 °C | 150% recovers automatically after fault removed | P |
| OVER VOLTAGE PROTECTION | 115~140% | I/P:220VAC O/P:min. load Ta:25 °C | 120% recovers automatically after fault removed | P |
| OVER TEMP. PROTECTION | temp. sensor:95±10°C no damage | I/P:220VAC O/P:full load | O.T.P active, recovers automatically after fault removed | p |

2. SAFETY TEST

| TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|-----------------------------|---|--|--|----------|
| WITHSTAND VOLTAGE | I/P-O/P:3KVAC/1min<10mA I/P-F/G:1.5KAC/1min<10mA O/P-F/G:0.5KAC/1min<10mA | I/P-O/P:3KVAC/1min I/P-F/G:1.5KAC/1min O/P-F/G:0.5KAC/1min Ta:25 °C | I/P-O/P:1.9mA I/P-F/G:2.2mA O/P-F/G:0.3mA no damage | P |
| ISOLATION RESISTANCE | I/P-O/P:500VDC>100MΩ I/P-F/G:500VDC>100MΩ O/P-F/G:500VDC>100MΩ | I/P-O/P:500VDC I/P-F/G:500VDC O/P-F/G:500VDC Ta:25 °C | I/P-O/P:∞ I/P-F/G:∞ O/P-F/G:∞ no damage | P |

3. RELIABILITY TEST

Test Report : UP100S12W2S



| TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | VERDICT |
|---------------------------|---------------------|---|---------|---------|
| LOW TEMP. TURN ON TEST | turn on after 2hour | I/P:220VAC O/P:full load Ta:-40°C | test ok | P |
| STORAGE TEMP. TEST | no damage | 1.thermal shock temp.: -40~+75°C 2.test time low & high temp.:30min/each 3.total cycle:5cycle 4.input/output condition:static | test ok | P |
| THERMAL SHOCK TEST | no damage | 1.thermal shock temp.: -20~+50°C 2.test time low & high temp.:30min/each 3.total cycle:10cycle 4.input/output condition: 220VAC 75% load, AC on/off test (turn on 58sec,turn off 2sec) | test ok | P |
| VIBRATION TEST | no damage | 1.CATON&1SET 1.wave form:sine wave 2.frequency:10~500Hz 3.sweep time:10min./sweep cycle 4.acceleration:2G 5.test time:60min. in each(X,Y,Z) 6.Ta:25°C | test ok | P |