

Model : ES18x24 18W
V1 : +24V / 0.75A

AC-DC Single Output adaptor

OUTPUT FUNCTION TEST

| NO | TEST ITEM | SPECICATION | TEST CONDITION | RESULT | VERDICT |
|----|-------------------|-----------------|---|-----------------|---------|
| 1 | RIPPLE & NOISE | 180mVp-p (Typ) | I/P:230VAC O/P:FULL LOAD Ta:25°C | 16mVp-p | P |
| 2 | VOLTAGE TOLERANCE | -2% ~ +2% (Max) | I/P:90VAC~264VAC O/P:FULL~MIN. LOAD Ta:25°C | -0.17% ~ +0.25% | P |
| 3 | LINE REGULATION | -1% ~ +1% (Max) | I/P:90VAC ~264VAC O/P:FULL LOAD Ta:25°C | -0.05% ~ +0% | P |
| 4 | LOAD REGULATION | -2% ~ +2% (Max) | I/P:230VAC O/P:FULL ~MIN LOAD Ta:25°C | -0.17% ~ +0.25% | P |
| 5 | SET UP TIME | 300 mS (Max) | I/P:230VAC O/P:FULL LOAD Ta:25°C | 68.69 mS | P |
| 6 | RISE TIME | 100 mS (Max) | I/P:230VAC O/P:FULL LOAD Ta:25°C | 35.87 mS | P |
| 7 | HOLD UP TIME | 16 mS (Min) | I/P:115VAC O/P:FULL LOAD Ta:25°C | 23.1 mS | P |

INPUT FUNCTION TEST

| NO | TEST ITEM | SPECICATION | TEST CONDITION | RESULT | VERDICT |
|----|-----------------|---|--|----------------------------|---------|
| 1 | VOLTAGE RANGE | 100VAC ~ 240VAC (Typ) | I/P:TESTING O/P:FULL LOAD Ta:25°C | 72V ~ 264V | P |
| 2 | FREQUENCY RANGE | 50HZ - 60HZ (Typ) NO DAMAGE OSC | I/P: 100VAC ~ 240VAC O/P:FULL~MIN LOAD Ta:25°C | TEST: OK | P |
| 3 | EFFICIENCY | 80% (Typ) | I/P:230VAC O/P:FULL LOAD Ta:25°C | 83.7% | P |
| 4 | AC CURRENT | 0.5A (Max) | I/P: 100VAC O/P:FULL LOAD Ta:25°C | 0.36A | P |
| 5 | INRUSH CURRENT | < 40A COLD START | I/P:230VAC O/P:FULL LOAD Ta:25°C | 23.5A | P |
| 6 | LEAKAGE CURRENT | < 0.75mA FOR CLASS I < 0.25mA FOR CLASS II | I/P:240VAC O/P:Min LOAD Ta:25°C | L-FG:0.02mA N-FG:0.02mA | P |

PROTECTION FUNCTION TEST

| NO | TEST ITEM | SPECICATION | TEST CONDITION | RESULT | VERDICT |
|----|-------------------------|--|--|--|---------|
| 1 | OVER LOAD PROTECTION | 130 - 350% (Typ) | I/P:230VAC O/P:TESTING Ta:25°C | 180% HICCUP MODE RESET AUTO RECOVER | P |
| 2 | OVER VOLTAGE PROTECTION | CLAMP BY ZENER DIODE 105 - 135% (Typ) | I/P:230VAC O/P:MIN LOAD Ta:25°C | CLAMP BY ZENER DIODE (P6KE27A) | P |
| 3 | SHORT PROTECTION | SHORT OUTPUT 1 HOUR NO DAMAGE | I/P:264VAC O/P:FULL LOAD Ta:25°C | NO DAMAGE HICCUP MODE RESET AUTO RECOVER | P |

SAFETY & E.M.C TEST

| NO | TEST ITEM | SPECICATION | TEST CONDITION | RESULT | VERDICT |
|----|----------------------|---|---|-------------------------------|---------|
| 1 | SAFETY STANDARDS | TUV: Certificate No : S 50050516 CLASS I S 50050512 CLASS II UL: File No : E183223 BSMI: Certificate No : R33100 | | | P |
| 2 | HARMONIC | IEC61000-3-2 CLASS A | I/P:230VAC / 50HZ O/P:FULL LOAD Ta:25°C | PASS | P |
| 3 | CONDUCTION | EN55022 CLASS B | I/P:230VAC (50HZ) O/P:FULL LOAD Ta:25°C | PASS | P |
| 4 | RADIATION | EN55022 CLASS B | I/P:230VAC (50HZ) O/P:FULL LOAD Ta:25°C | PASS | P |
| 5 | E.S.D | IEC61000-4-2 LIGHT INDUSTRY AIR:8KV / Contact:4KV | I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C | CRITERIA A | P |
| 6 | E.F.T | IEC61000-4-4 LIGHT INDUSTRY INPUT: 1KV | I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C | CRITERIA A | P |
| 7 | SURGE | IEC61000-4-5 LIGHT INDUSTRY L-N :1KV | I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C | CRITERIA A | P |
| 8 | WITHSTAND VOLTAGE | I/P-O/P:3KVAC/min | I/P-O/P:3KVAC/min Ta:25°C | I/P-O/P:1.747 mA NO DAMAGE | P |
| 9 | ISOLATION RESISTANCE | I/P-O/P:500VDC>100MΩ | I/P-O/P:500VDC Ta:25°C | I/P-O/P:>100MΩ NO DAMAGE | P |



OTHER

| NO | TEST ITEM | SPECICATION | TEST CONDITION | RESULT | VERDICT |
|----|-----------|---|----------------|--------|---------|
| 1 | MTBF | MIL-HDBK-217F NOTICES2 STRESS ANALYSIS PREDICTION TOTAL FAILURE RATE: 1.580515 M.T.B.F: 632705HRS | | | P |

| DATE | SAMPLE | TEST RESULT | TESTER | APPROVAL |
|------------|--------|-------------|--------|-----------|
| 2007.12.25 | STOCK | PASS | PETER | T.K.CHENG |