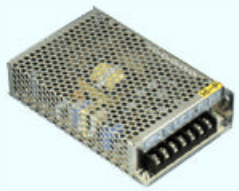
# MEAN WELL

## SWITCHING POWER SUPPLY

**ISO-9001 CERTIFIED MANUFACTURER**

# S-50 SERIES

.LOW COST, HIGH RELIABILITY .COMPACT SIZE, LIGHT WEIGHT
.105°C OUTPUT CAPACITOR .100% FULL LOAD BURN-IN TEST
.INTERNATIONAL AC INPUT RANGE .BUILT IN EMI FILTER, LOW RIPPLE NOISE
.HIGH EFFICIENCY, LOW WORKING TEMPERATURE
.SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
.SHORT CIRCUIT, OVERLOAD PROTECTED



| MODEL / SPECIFICATION | S-50-5 | S-50-12 | S-50-15 | S-50-24 |
|---|---|---|---|---|
| DC OUTPUT VOLTAGE | 5V | 12V | 15V | 24V |
| OUTPUT V. TOLERANCE | ±2% | ±1% | ±1% | ±1% |
| OUTPUT RATED CURRENT | 10A | 4.2A | 3.4A | 2.1A |
| OUTPUT CURRENT RANGE | 0-10A | 0-4.2A | 0-3.4A | 0-2.1A |
| RIPPLE & NOISE | 75mVp-p | 100mVp-p | 100mVp-p | 100mVp-p |
| LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| LOAD REGULATION | ±1% | ±0.5% | ±0.5% | ±0.5% |
| DC OUTPUT POWER | 50W | 50.4W | 51W | 50.4W |
| EFFICIENCY | 71% | 78% | 78% | 82% |
| DC VOLTAGE ADJ. | +10,-5% | ±10% | ±10% | ±10% |
| INPUT VOLTAGE RANGE | 85~132VAC / 170~264VAC SELECTED BY SWITCH 47~63Hz; 240~370VDC | | | |
| AC CURRENT | 1.3A/115V 0.65A/230V | | | |
| INRUSH CURRENT | COLD START 18A/115V 36A/230V | | | |
| LEAKAGE CURRENT | <0.5mA/240VAC | | | |
| OVERLOAD PROTECTION | 105%~150% TYPE:FOLDBACK CURRENT LIMITING RESET:AUTO RECOVERY | | | |
| OVER VOLTAGE PROTECTION | ---------- | | | |
| OVER TEMP. PROTECTION | ---------- | | | |
| TEMP. COEFFICIENT | ±0.03% / °C (0~50°C) | | | |
| SETUP, RISE, HOLD UP TIME | 200ms, 100ms, 20ms | | | |
| VIBRATION | 10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES | | | |
| WITHSTAND VOLTAGE | I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC | | | |
| ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms | | | |
| WORKING TEMP., HUMIDITY | -10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH | | | |
| STORAGE TEMP., HUMIDITY | -20°C~+85°C, 10%~95% RH | | | |
| DIMENSION | 159*97*38mm CASE:901 | | | |
| WEIGHT | 0.5Kgs | | | |
| SAFETY STANDARDS | MEET UL1012 REQUIREMENT (NOT APPLY FOR THE MARK) | | | |
| EMC STANDARDS | ---------- | | | |

NOTE :
1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
2.TOLERANCE GINCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
5.LOAD REGULATION IS MEASURED FROM 0% TO 100% RATED LOAD.

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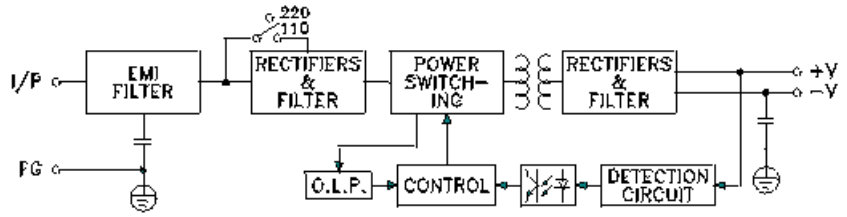
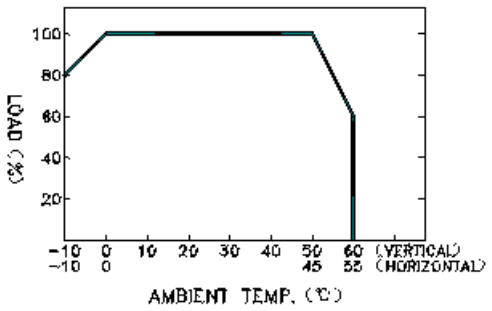
## BLOCK DIAGRAM

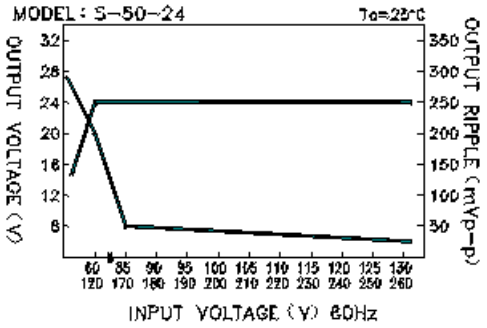



fosc: 27KHz I/P-O/P:RATED

## OUTPUT DERATING




## STATIC CHARACTERISTICS




## DIMENSION (mm)

- CASE : 901
- TERMINAL PIN NO. ASSIGNMENT
  - PIN 1,2 : AC INPUT
  - PIN 3 : FG ⏚
  - PIN 4 : DC OUTPUT -V
  - PIN 5 : DC OUTPUT +V