



## Features :

- AC input range selected by switch
- Protections: Short circuit / Overload / Over voltage
- Forced air cooling by built-in DC fan
- 100% full load burn-in test
- Fixed switching frequency at 60KHz
- Low cost
- High reliability
- 2 years warranty

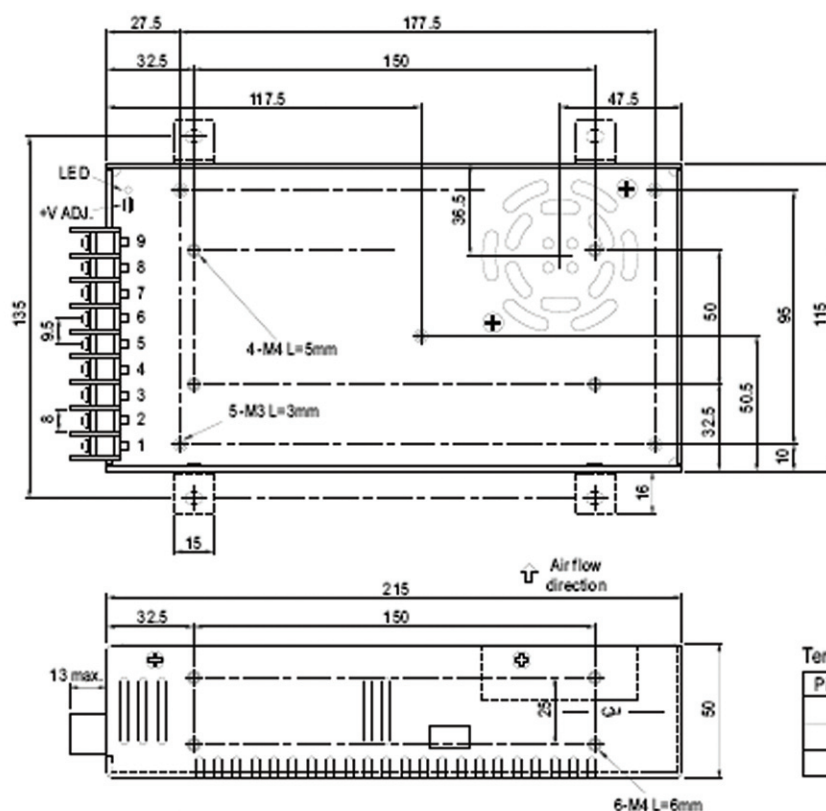


## SPECIFICATION

| MODEL            |                                                                                                                                                                                                                                                                                                                                                  | S-250-5                                                                                                                | S-250-12     | S-250-15       | S-250-24     | S-250-27       | S-250-48     |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------|----------------|--------------|----------------|--------------|
| OUTPUT           | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                       | 5V                                                                                                                     | 12V          | 15V            | 24V          | 27V            | 48V          |
|                  | RATED CURRENT                                                                                                                                                                                                                                                                                                                                    | 40A                                                                                                                    | 18A          | 15A            | 10A          | 9A             | 5.2A         |
|                  | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                    | 0 ~ 40A                                                                                                                | 0 ~ 18A      | 0 ~ 15A        | 0 ~ 10A      | 0 ~ 9A         | 0 ~ 5.2A     |
|                  | RATED POWER                                                                                                                                                                                                                                                                                                                                      | 200W                                                                                                                   | 216W         | 225W           | 240W         | 243W           | 249.6W       |
|                  | RIPPLE & NOISE (max.) Note.2                                                                                                                                                                                                                                                                                                                     | 80mVp-p                                                                                                                | 120mVp-p     | 120mVp-p       | 120mVp-p     | 150mVp-p       | 200mVp-p     |
|                  | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                               | 4.75 ~ 5.5V                                                                                                            | 10.8 ~ 13.2V | 13.5 ~ 16.5V   | 21.6 ~ 26.4V | 24.3 ~ 29.7V   | 43.2 ~ 52.8V |
|                  | VOLTAGE TOLERANCE Note.3                                                                                                                                                                                                                                                                                                                         | ±2.0%                                                                                                                  | ±1.0%        | ±1.0%          | ±1.0%        | ±1.0%          | ±1.0%        |
|                  | LINE REGULATION                                                                                                                                                                                                                                                                                                                                  | ±0.5%                                                                                                                  | ±0.5%        | ±0.5%          | ±0.5%        | ±0.5%          | ±0.5%        |
|                  | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                  | ±1.0%                                                                                                                  | ±0.5%        | ±0.5%          | ±0.5%        | ±0.5%          | ±0.5%        |
|                  | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                 | 800ms, 50ms at full load                                                                                               |              |                |              |                |              |
| HOLD TIME (Typ.) | 19ms at full load                                                                                                                                                                                                                                                                                                                                |                                                                                                                        |              |                |              |                |              |
| INPUT            | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                    | 90 ~ 132VAC / 176 ~ 264VAC Selected by switch 248~370VDC                                                               |              |                |              |                |              |
|                  | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                  | 47 ~ 63Hz                                                                                                              |              |                |              |                |              |
|                  | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                | 74%                                                                                                                    | 79%          | 80%            | 81.5%        | 82%            | 82%          |
|                  | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                | 4.8A/115VAC 2.8A/230VAC                                                                                                |              |                |              |                |              |
|                  | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                            | COLD START 45A/230VAC                                                                                                  |              |                |              |                |              |
|                  | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                  | <2mA/ 240VAC                                                                                                           |              |                |              |                |              |
| PROTECTION       | OVER LOAD                                                                                                                                                                                                                                                                                                                                        | 105 ~ 135% rated output power<br>Protection type: Hiocup mode, recovers automatically after fault condition is removed |              |                |              |                |              |
|                  | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                     | 5.75 ~ 6.75V                                                                                                           | 13.8 ~ 16.2V | 17.25 ~ 20.25V | 27.6 ~ 32.4V | 31.05 ~ 36.45V | 55.2 ~ 64.8V |
| ENVIRONMENT      | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                    | -10 ~ +60℃ (Refer to "Derating Curve")                                                                                 |              |                |              |                |              |
|                  | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                 | 20 ~ 90% RH non-condensing                                                                                             |              |                |              |                |              |
|                  | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                          | -20 ~ +85℃, 10 ~ 95% RH                                                                                                |              |                |              |                |              |
|                  | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                | ±0.03%/℃ (0 ~ 50℃)                                                                                                     |              |                |              |                |              |
|                  | VIBRATION                                                                                                                                                                                                                                                                                                                                        | 10 ~ 500Hz, 2G 10min/1cycle, 60min. each along X, Y, Z axes                                                            |              |                |              |                |              |
| SAFETY           | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                 | UL60950-1 approved                                                                                                     |              |                |              |                |              |
|                  | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                | I/P-O/P: 3KVAC I/P-FG: 1.5KVAC O/P-FG: 0.5KVAC                                                                         |              |                |              |                |              |
|                  | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                             | I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25℃ / 70% RH                                                             |              |                |              |                |              |
| OTHERS           | MTBF                                                                                                                                                                                                                                                                                                                                             | 238.9K hrs min. MIL-HDBK-217F (25℃)                                                                                    |              |                |              |                |              |
|                  | DIMENSION                                                                                                                                                                                                                                                                                                                                        | 150*140*86mm (L*W*H)                                                                                                   |              |                |              |                |              |
|                  | PACKING                                                                                                                                                                                                                                                                                                                                          | 1.15Kg; 8pcs/10.2Kg/0.97CUFT                                                                                           |              |                |              |                |              |
| NOTE             | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHZ of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : Includes set up tolerance, line regulation and load regulation. |                                                                                                                        |              |                |              |                |              |

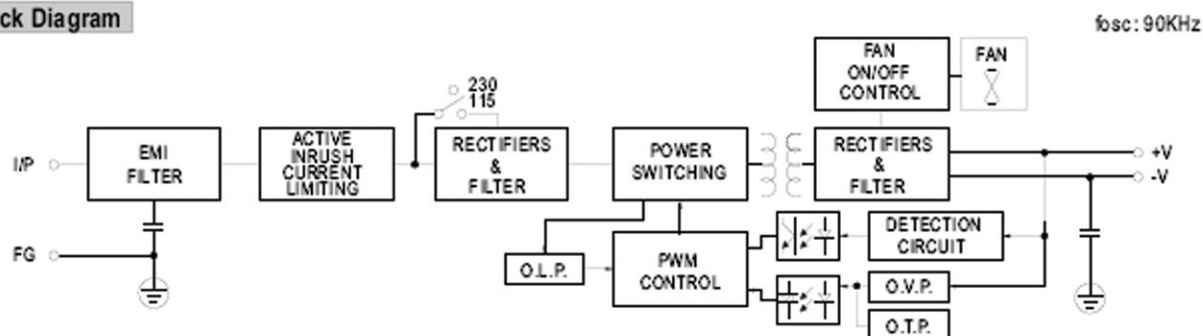
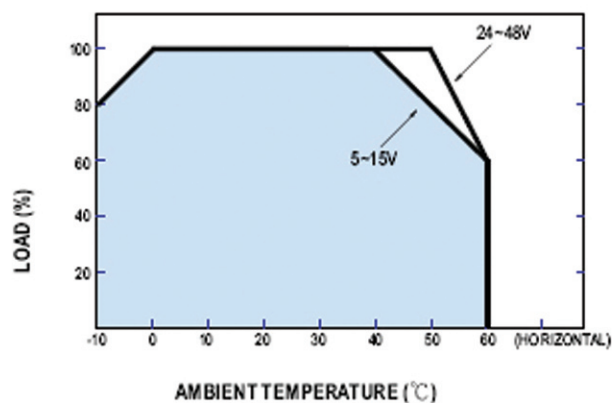
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Case No.912A Unit:mm

**Mechanical Specification**


Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment   |
|---------|------------|---------|--------------|
| 1       | AC/L       | 4-6     | DC OUTPUT -V |
| 2       | AC/N       | 7-9     | DC OUTPUT +V |
| 3       | FG         |         |              |

**Block Diagram**

**Derating Curve**

**Static Characteristics**
