



### ■ Features :

- AC input range selectable by switch
- Protections: Short circuit/Over load/Over voltage/Over temperature
- Forced air cooling by built-in DC fan
- Cooling Fan ON-OFF auto control
- 100% full load burn-in test
- Fixed switching frequency at 90KHz
- 2 years warranty

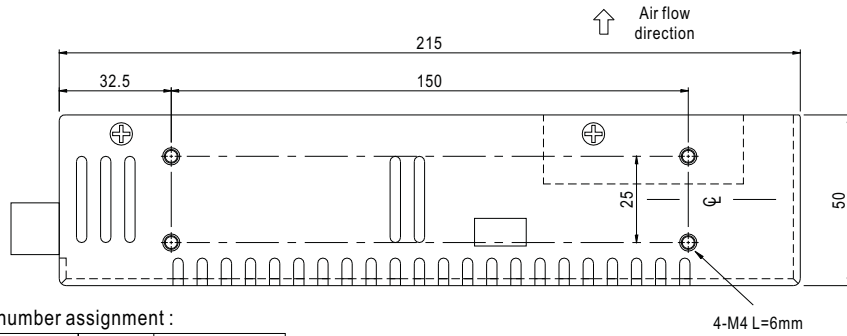
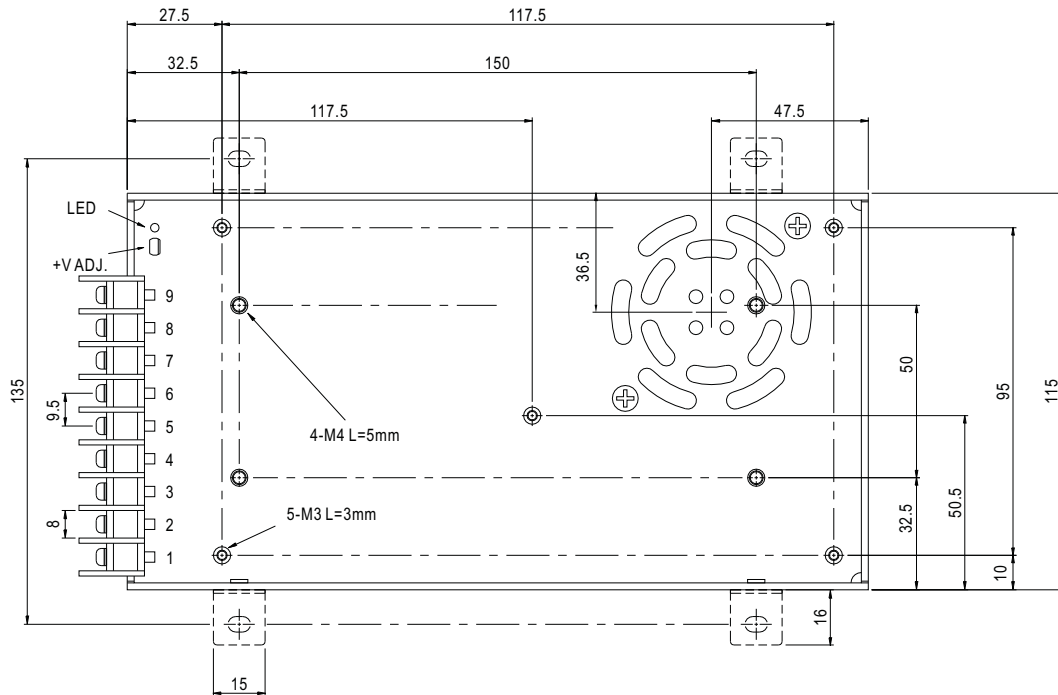


### SPECIFICATION

| MODEL                  | S-320-5   | S-320-7.5   | S-320-12    | S-320-13.5   | S-320-15     | S-320-24   | S-320-27     | S-320-48     |              |
|------------------------|---|---|-------------|--------------|--------------|------------|--------------|--------------|--------------|
| OUTPUT                 | DC VOLTAGE  | 5V  | 7.5V        | 12V          | 13.5V        | 15V        | 24V          | 27V          | 48V          |
|                        | RATED CURRENT   | 50A   | 36A         | 25A          | 22A          | 20A        | 12.5A        | 11A          | 6.5A         |
|                        | CURRENT RANGE   | 0 ~ 50A   | 0 ~ 36A     | 0 ~ 25A      | 0 ~ 22A      | 0 ~ 20A    | 0 ~ 12.5A    | 0 ~ 11A      | 0 ~ 6.5A     |
|                        | RATED POWER   | 250W  | 270W        | 300W         | 297W         | 300W       | 300W         | 297W         | 312W         |
|                        | RIPPLE & NOISE (max.) Note.2  | 150mVp-p  | 150mVp-p    | 150mVp-p     | 150mVp-p     | 150mVp-p   | 150mVp-p     | 200mVp-p     | 240mVp-p     |
|                        | VOLTAGE ADJ. RANGE  | 4.5 ~ 5.7V  | 6 ~ 9V      | 10 ~ 13.2V   | 12 ~ 15V     | 13.5 ~ 18V | 20 ~ 26.4V   | 26 ~ 32V     | 41 ~ 56V     |
|                        | VOLTAGE TOLERANCE Note.3  | ±2.0%   | ±2.0%       | ±1.0%        | ±1.0%        | ±1.0%      | ±1.0%        | ±1.0%        | ±1.0%        |
|                        | LINE REGULATION   | ±0.5%   | ±0.5%       | ±0.5%        | ±0.5%        | ±0.5%      | ±0.5%        | ±0.5%        | ±0.5%        |
|                        | LOAD REGULATION   | ±1.0%   | ±1.0%       | ±0.5%        | ±0.5%        | ±0.5%      | ±0.5%        | ±0.5%        | ±0.5%        |
| SETUP, RISE, HOLD TIME | 2000ms, 20ms, 20ms at full load   |   |             |              |              |            |              |              |              |
| INPUT                  | VOLTAGE RANGE   | 88 ~ 132VAC / 176~264VAC by switch      248 ~ 370VDC  |             |              |              |            |              |              |              |
|                        | FREQUENCY RANGE   | 47 ~ 63Hz   |             |              |              |            |              |              |              |
|                        | EFFICIENCY(Typ.)  | 77%   | 80%         | 82%          | 83%          | 84%        | 86%          | 86%          | 87%          |
|                        | AC CURRENT  | 6A/115VAC    3.5A/230VAC  |             |              |              |            |              |              |              |
|                        | INRUSH CURRENT(max.)  | 20A/115VAC    40A/230VAC  |             |              |              |            |              |              |              |
| LEAKAGE CURRENT        | <3.5mA / 240VAC   |   |             |              |              |            |              |              |              |
| PROTECTION             | OVER LOAD   | 105 ~ 135% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed                     |             |              |              |            |              |              |              |
|                        | OVER VOLTAGE  | 5.75 ~ 6.75V  | 9.4 ~ 10.9V | 13.8 ~ 16.2V | 15.5 ~ 18.2V | 18 ~ 21V   | 27.6 ~ 32.4V | 33.7 ~ 39.2V | 57.6 ~ 67.2V |
|                        | FAN CONTROL O.T.P.  | RTH1 ≥ 65°C FAN ON, ≤ 55°C FAN OFF, ≥ 70°C output shutdown(5 ~ 15V)<br>RTH1 ≥ 70°C FAN ON, ≤ 65°C FAN OFF, ≥ 80°C output shutdown(24 ~ 48V) |             |              |              |            |              |              |              |
| ENVIRONMENT            | WORKING TEMP.   | -10 ~ +60°C (Refer to output load derating curve)   |             |              |              |            |              |              |              |
|                        | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing  |             |              |              |            |              |              |              |
|                        | STORAGE TEMP., HUMIDITY   | -20 ~ +85°C, 10 ~ 95% RH  |             |              |              |            |              |              |              |
|                        | TEMP. COEFFICIENT   | ±0.03%/°C (0 ~ 50°C)  |             |              |              |            |              |              |              |
| VIBRATION              | 10 ~ 500Hz, 2G 10min./1cycle, Period for 60min. each along X, Y, Z axes   |   |             |              |              |            |              |              |              |
| SAFETY & EMC           | SAFETY STANDARDS  | UL1950 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  |             |              |              |            |              |              |              |
| OTHERS                 | MTBF  | 188.7K hrs min.    MIL-HDBK-217F (25°C)   |             |              |              |            |              |              |              |
|                        | DIMENSION   | 215*115*50mm (L*W*H)  |             |              |              |            |              |              |              |
|                        | PACKING   | 1.08Kg; 12pcs/12.96Kg/0.98CUFT  |             |              |              |            |              |              |              |
| NOTE                   | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C 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. |   |             |              |              |            |              |              |              |

■ Mechanical Specification

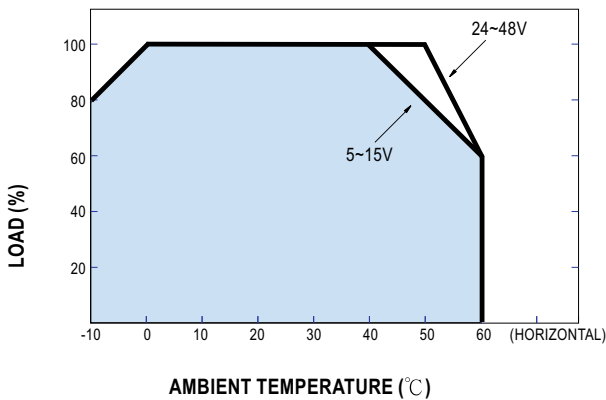
Case No. 912 Unit:mm



Terminal pin number 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 $\perp$ |         |              |

■ Derating Curve



■ Static Characteristics

