

### ■ Features :

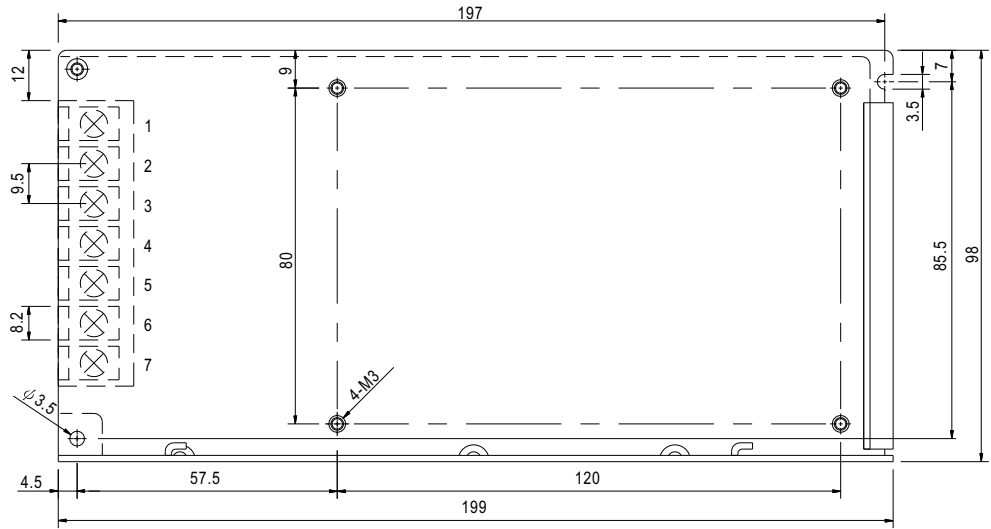
- AC input range selectable by switch
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 25KHz
- LED indicator for power on
- Made in China for low cost
- High reliability
- 1 year warranty

### SPECIFICATION

| MODEL               | S-145-5   | S-145-7.5  | S-145-12          | S-145-15          | S-145-24           | S-145-27        | S-145-48       |              |
|---------------------|---|--|-------------------|-------------------|--------------------|-----------------|----------------|--------------|
| OUTPUT              | DC VOLTAGE  | 5V   | 7.5V              | 12V               | 15V                | 24V             | 27V            | 48V          |
|                     | RATED CURRENT   | 25A  | 18A               | 12A               | 9.6A               | 6A              | 5.3A           | 3A           |
|                     | CURRENT RANGE   | 0 ~ 25A(30A max.)  | 0 ~ 18A(21A max.) | 0 ~ 12A(14A max.) | 0 ~ 9.6A(11A max.) | 0 ~ 6A(7A max.) | 0 ~ 5.3A       | 0 ~ 3A       |
|                     | RATED POWER   | 125W   | 135W              | 144W              | 144W               | 144W            | 143.1W         | 144W         |
|                     | RIPPLE & NOISE (max.) Note.2  | 100mVp-p   | 120mVp-p          | 120mVp-p          | 120mVp-p           | 150mVp-p        | 200mVp-p       | 240mVp-p     |
|                     | VOLTAGE ADJ. RANGE  | 4.5 ~ 5.5V   | 6 ~ 8.3V          | 10.6 ~ 13.2V      | 13.2 ~ 16.5V       | 21 ~ 28V        | 24.5 ~ 29.5V   | 43.2 ~ 52.8V |
|                     | VOLTAGE TOLERANCE Note.3  | ±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%        |
|                     | LOAD REGULATION   | ±0.5%  | ±0.5%             | ±0.5%             | ±0.5%              | ±0.5%           | ±0.5%          | ±0.5%        |
|                     | SETUP, RISE TIME  | 100ms, 50ms at full load   |                   |                   |                    |                 |                |              |
| HOLD UP TIME (Typ.) | 24ms at full load   |  |                   |                   |                    |                 |                |              |
| INPUT               | VOLTAGE RANGE   | 88 ~ 132VAC/176 ~ 264VAC selected by switch  |                   |                   |                    |                 |                |              |
|                     | FREQUENCY RANGE   | 47 ~ 63Hz  |                   |                   |                    |                 |                |              |
|                     | EFFICIENCY (Typ.)   | 78%  | 80.5%             | 80.5%             | 81%                | 83.5%           | 85%            | 83.5%        |
|                     | AC CURRENT (Typ.)   | 2.6A/115VAC  |                   | 1.3A/230VAC       |                    |                 |                |              |
|                     | INRUSH CURRENT (Typ.)   | COLD START 32A   |                   |                   |                    |                 |                |              |
|                     | LEAKAGE CURRENT   | <3.5mA / 240VAC  |                   |                   |                    |                 |                |              |
| PROTECTION          | OVERLOAD  | 125 ~ 165% rated output power<br>Protection type : Shut down o/p voltage, re-power on to recover |                   |                   |                    |                 |                |              |
|                     | OVER VOLTAGE  | 5.6 ~ 6.8V   | 8.6 ~ 10V         | 13.8 ~ 16.2V      | 17.3 ~ 20.3V       | 29 ~ 32V        | 31.05 ~ 36.45V | 55.2 ~ 64.8V |
| 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, 60min. each along X, Y, Z axes                                     |                   |                   |                    |                 |                |              |
| SAFETY & EMC        | SAFETY STANDARDS  | Design refer to UL1012   |                   |                   |                    |                 |                |              |
|                     | 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:100M Ohms/500VDC   |                   |                   |                    |                 |                |              |
|                     | EMI CONDUCTION & RADIATION  | Compliance to EN55022 (CISPR22) Class B  |                   |                   |                    |                 |                |              |
| OTHERS              | EMS IMMUNITY  | Compliance to IEC801-2,3,4, light industry level, criteria A                                     |                   |                   |                    |                 |                |              |
|                     | MTBF  | 286.7K hrs min. MIL-HDBK-217F (25°C)   |                   |                   |                    |                 |                |              |
|                     | DIMENSION   | 199*98*38mm (L*W*H)  |                   |                   |                    |                 |                |              |
|                     | PACKING   | 0.71Kg; 30pcs/22.5Kg/1.22CUFT  |                   |                   |                    |                 |                |              |
| 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. |  |                   |                   |                    |                 |                |              |

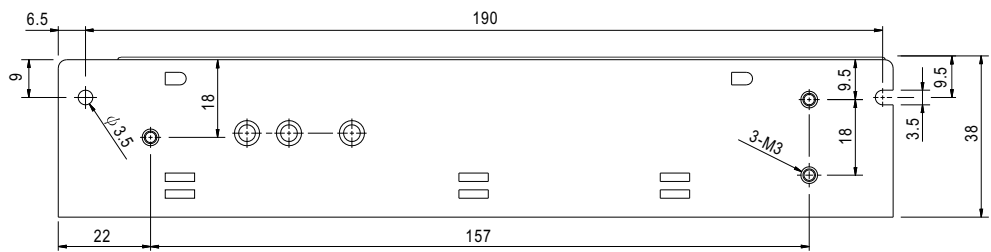
**Mechanical Specification**

Case No. 902 Unit:mm



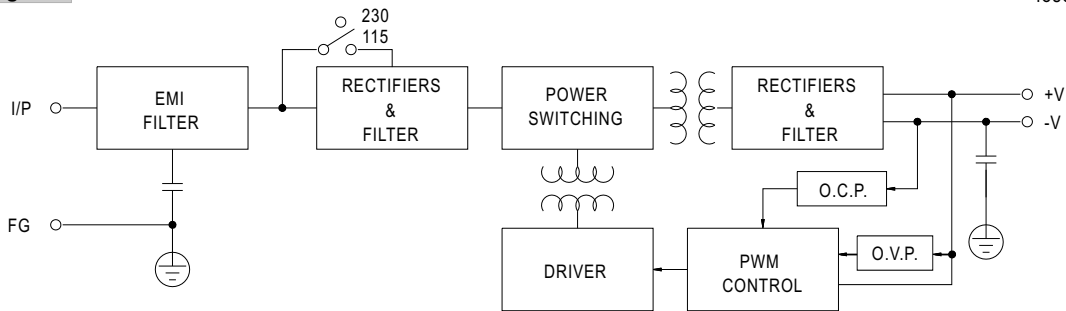
Terminal Pin No. Assignment

| Pin No. | Assignment   |
|---------|--------------|
| 1       | AC/L         |
| 2       | AC/N         |
| 3       | FG $\perp$   |
| 4,5     | DC OUTPUT -V |
| 6,7     | DC OUTPUT +V |

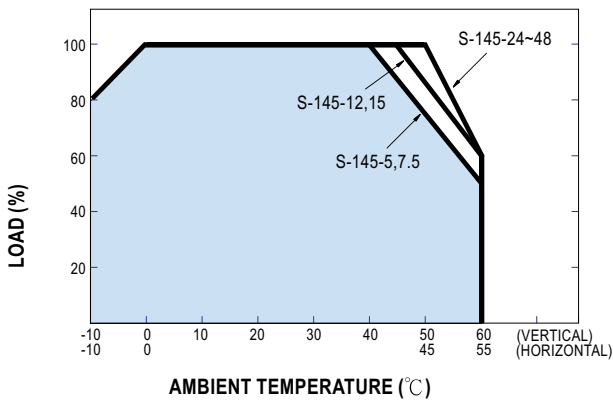


**Block Diagram**

fosc : 25KHz



**Derating Curve**



**Static Characteristics (24V)**

