## Features :
- Universal AC input / Full range
- Built-in active PFC function, PF>0.93
- Protections:Short circuit/Over load/Over voltage
- Built-in constant current limiting circuit
- Low profile: 33mm thickness
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at PFC:67KHz  PWM:134KHz
- 3 years warranty

## SPECIFICATION

| MODEL | | SP-75-3.3 | SP-75-5 | SP-75-7.5 | SP-75-12 | SP-75-13.5 | SP-75-15 | SP-75-24 | SP-75-27 | SP-75-48 |
|---|---|---|---|---|---|---|---|---|---|---|
| OUTPUT | DC VOLTAGE | 3.3V | 5V | 7.5V | 12V | 13.5V | 15V | 24V | 27V | 48V |
| | RATED CURRENT | 15A | 15A | 10A | 6.3A | 5.6A | 5A | 3.2A | 2.8A | 1.6A |
| | CURRENT RANGE | 0 ~ 15A | 0 ~ 15A | 0 ~ 10A | 0 ~ 6.3A | 0 ~ 5.6A | 0 ~ 5A | 0 ~ 3.2A | 0 ~ 2.8A | 0 ~ 1.6A |
| | RATED POWER | 49.5W | 75W | 75W | 75.6W | 75.6W | 75W | 76.8W | 75.6W | 76.8W |
| | RIPPLE & NOISE (max.) Note.2 | 80mVp-p | 80mVp-p | 80mVp-p | 80mVp-p | 80mVp-p | 80mVp-p | 100mVp-p | 100mVp-p | 100mVp-p |
| | VOLTAGE ADJ. RANGE | 3.14 ~ 3.63V | 4.75 ~ 5.5V | 7.13 ~ 8.25V | 11.4 ~ 13.2V | 12.8 ~ 14.9V | 14.3 ~ 16.5V | 22.8 ~ 26.4V | 25.7 ~ 29.7V | 45.6 ~ 52.8V |
| | VOLTAGE TOLERANCE  Note.3 | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±1.0% | ±1.0% | ±1.0% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | SETUP, RISE, HOLD TIME | 600ms, 60ms, 20ms at full load | | | | | | | | |
| INPUT | VOLTAGE RANGE  Note.5 | 85 ~ 264VAC          120 ~ 370VDC | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | POWER FACTOR | PF>0.93/230VAC          PF>0.96/115VAC at full load | | | | | | | | |
| | EFFICIENCY (Typ.) | 68% | 72% | 74% | 77% | 78% | 79% | 80% | 80% | 80% |
| | AC CURRENT | 1.3A/115VAC          0.7A/230VAC | | | | | | | | |
| | INRUSH CURRENT (max.) | COLD START 40A/230VAC | | | | | | | | |
| | LEAKAGE CURRENT | <2mA / 240VAC | | | | | | | | |
| PROTECTION | OVER LOAD | 105 ~ 150% rated output power | | | | | | | | |
| | | Protection type : Constant current limiting, recovers automatically after fault condition is removed | | | | | | | | |
| | OVER VOLTAGE | 3.8 ~ 4.46V | 5.75 ~ 6.75V | 8.63 ~ 10.13V | 13.8 ~ 16.2V | 15.53 ~ 18.23V | 17.25 ~ 20.25V | 27.6 ~ 32.4V | 31.05 ~ 36.45V | 55.2 ~ 64.8V |
| | | Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | | |
| FUNCTION | REMOTE CONTROL(OPTION) | CN3:4 ~ 10VDC POWER OFF, <0 ~ 0.8VDC POWER ON | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60℃ (Refer to output load derating curve) | | | | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85℃, 10 ~ 95% RH | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.05%/℃ (0 ~ 50℃ ) | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | | | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 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 | | | | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B | | | | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,-3 | | | | | | | | |
| | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level,  criteria A | | | | | | | | |
| OTHERS | MTBF | 208.8K hrs min.     MIL-HDBK-217F (25℃ ) | | | | | | | | |
| | DIMENSION | 179*97*33mm (L*W*H) | | | | | | | | |
| | PACKING | 0.58Kg; 20pcs/12Kg/0.64CUFT | | | | | | | | |
| NOTE | | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 5. Derating may be needed under low input voltages. Please check the derating curve for more details. | | | | | | | | |

## ■ Mechanical Specification

Case No. 920A    Unit:mm
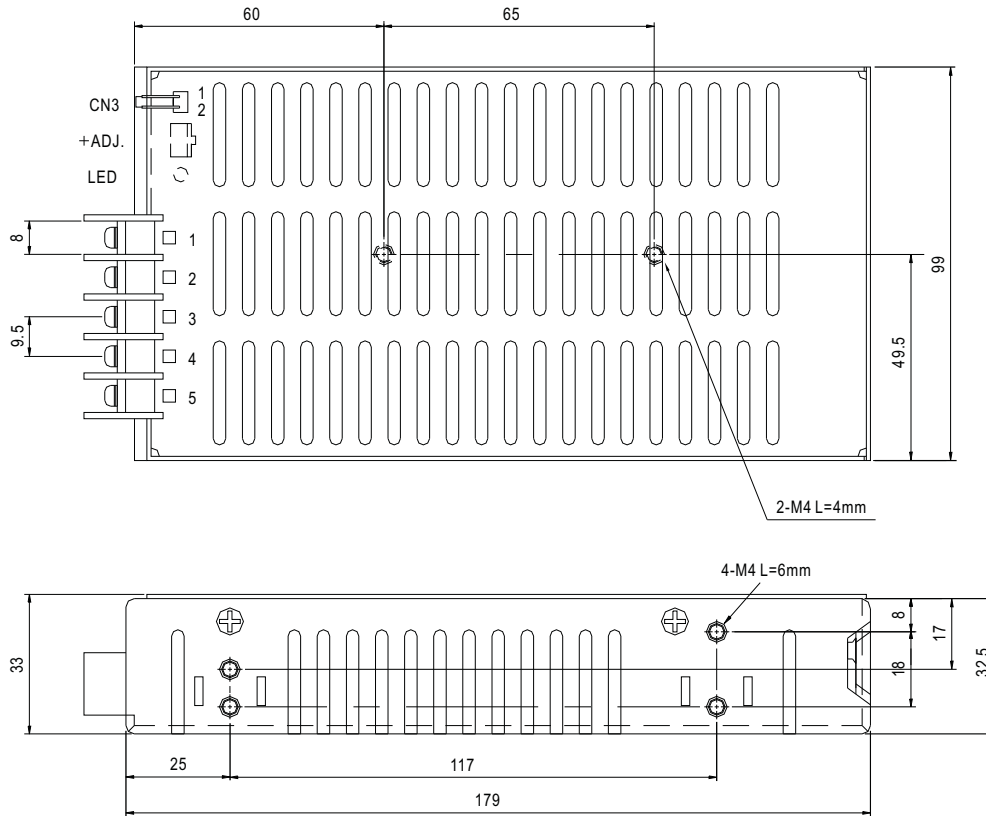


**Terminal pin number assignment :**

| Pin No. | Assignment | Pin No. | Assignment |
|---------|------------|---------|------------|
| 1 | DC OUTPUT +V | 3 | FG ⏚ |
| 2 | DC OUTPUT -V | 4,5 | AC INPUT |

Remote ON/OFF(CN3):Molex 5046-02 or equivalent(optional)

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|----------------|----------|
| 1 | RC- | Molex 5051 or equivalent | Molex 2759 or equivalent |
| 2 | RC+ | | |

## ■ Derating Curve



AMBIENT TEMPERATURE (℃)
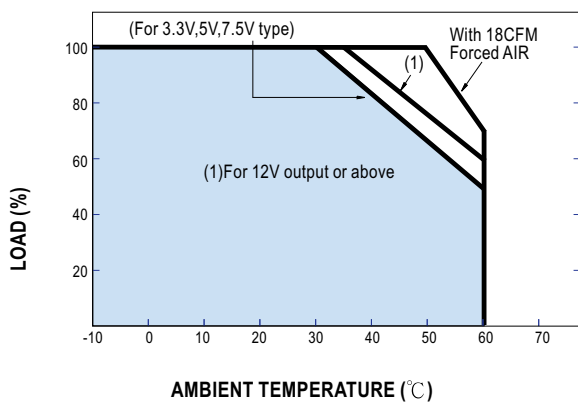
## ■ Output Derating VS Input Voltage



INPUT VOLTAGE (VAC) 60Hz