



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.93
- Protections: Short circuit / Overload / 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

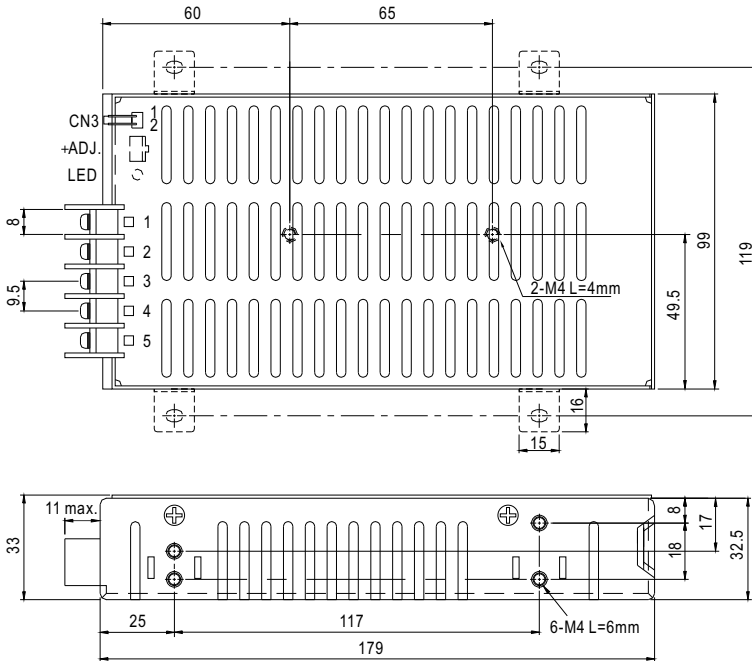


SPECIFICATION

| 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 TIME | 600ms, 60ms at full load | | | | | | | | |
| HOLD UP TIME (Typ.) | 36ms at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE Note.5 | 85 ~ 264VAC | | 120 ~ 370VDC | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | POWER FACTOR (Typ.) | PF>0.93/230VAC | | 0.96/115VAC at full load | | | | | | |
| | EFFICIENCY (Typ.) | 68% | 72% | 74% | 77% | 78% | 79% | 80% | 80% | 80% |
| | AC CURRENT (Typ.) | 1.3A/115VAC | | 0.7A/230VAC | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 30A/230VAC | | | | | | | | |
| | LEAKAGE CURRENT | <2mA / 240VAC | | | | | | | | |
| PROTECTION | OVERLOAD | 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 |
| FUNCTION | REMOTE CONTROL(OPTION) | CN3:4 ~ 10VDC POWER OFF, <0 ~ 0.8VDC POWER ON | | | | | | | | |
| 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 | 0.05%/C (0 ~ 50C) | | | | | | | | |
| | 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 | | | | | | | | |
| OTHERS | MTBF | 208.8K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| NOTE | DIMENSION | 179*97*33mm (L*W*H) | | | | | | | | |
| | PACKING | 0.58Kg; 20pcs/12Kg/0.64CUFT | | | | | | | | |
| <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>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.</p> <p>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> | | | | | | | | | | |

Mechanical Specification

Case No. 920A Unit:mm



Terminal Pin No. Assignment

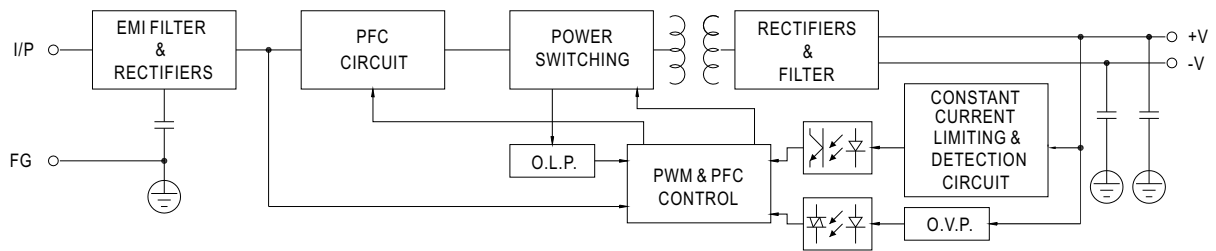
| Pin No. | Assignment | Pin No. | Assignment |
|---------|--------------|---------|------------|
| 1 | DC OUTPUT +V | 4 | AC/N |
| 2 | DC OUTPUT -V | 5 | AC/L |
| 3 | FG \pm | | |

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

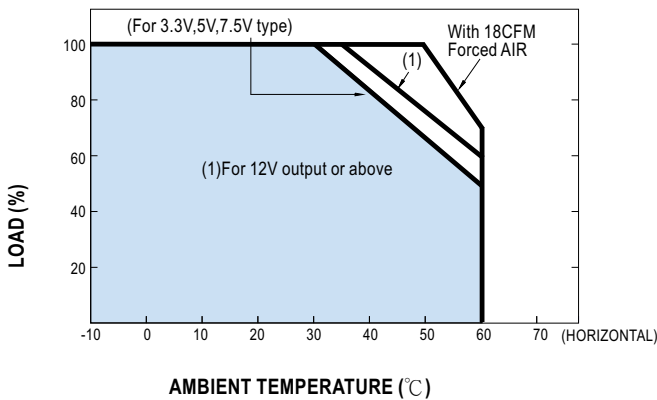
| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|--------------------------|--------------------------|
| 1 | RC- | Molex 5051 or equivalent | Molex 2759 or equivalent |
| 2 | RC+ | | |

Block Diagram

PFC fosc : 67KHz
PWM fosc : 134KHz



Derating Curve



Output Derating VS Input Voltage

