

- Universal AC input
- Protections: Short circuit/Over load/Over voltage
- Built-in active PFC function, PF >0.93
- LED indicator for power on
- Built-in constant current limiting circuit
- Low profile: 33mm thickness
- Fixed switching frequency at PFC: 67KHz PWM: 134KHz



| Model Number | Output Volts | Output Amps | Ripple & Noise | Min Load | DC Volt Adjust | Load Reg | Efficiency |
|----------------------|----------------|-------------|----------------|-----------|-------------------|----------|------------|
| SINGLE OUTPUT | | | | | | | |
| SP75-3.3/DRL | 3.3 Volts(DC) | 15 Amps | 80mV pk-pk | 0~15Amps | 3.14~3.63Volt(DC) | ±1.0% | 68% |
| SP75-5/DRL | 5 Volts(DC) | 15 Amps | 80mV pk-pk | 0~15Amps | 4.75~5.5Volt(DC) | ±1.0% | 72% |
| SP75-7.5/DRL | 7.5 Volts(DC) | 10 Amps | 80mV pk-pk | 0~10Amps | 7.13~8.25Volt(DC) | ±1.0% | 74% |
| SP75-12/DRL | 12 Volts(DC) | 6.3 Amps | 80mV pk-pk | 0~6.3Amps | 11.4~13.2Volt(DC) | ±0.5% | 77% |
| SP75-13.5/DRL | 13.5 Volts(DC) | 5.6 Amps | 80mV pk-pk | 0~5.6Amps | 12.8~14.9Volt(DC) | ±0.5% | 78% |
| SP75-15/DRL | 15 Volts(DC) | 5.0 Amps | 80mV pk-pk | 0~5.0Amps | 14.3~16.5Volt(DC) | ±0.5% | 79% |
| SP75-24/DRL | 24 Volts(DC) | 3.2Amps | 100mV pk-pk | 0~3.2Amps | 22.8~26.4Volt(DC) | ±0.5% | 80% |
| SP75-27/DRL | 27 Volts(DC) | 2.8 Amps | 100mV pk-pk | 0~2.8Amps | 25.7~29.7Volt(DC) | ±0.5% | 80% |
| SP75-48/DRL | 48 Volts(DC) | 1.6 Amps | 100mV pk-pk | 0~1.6Amps | 45.6~52.8Volt(DC) | ±0.5% | 80% |

75W Single Output with PFC Function

SP75/DRL series

INPUT SPECIFICATIONS

| | |
|-----------------------------------|-------------------------------|
| Input Voltage Range (Note 3) | 90 ~ 264VAC 120~370 Volts(DC) |
| Frequency Range | 47-63 Hz |
| Inrush Current, typ: (cold start) | 30Amps / 230VAC |
| Input Current | 1.3 Amps. @ 115VAC |
| | 0.7 Amps. @ 230VAC |
| Leakage current | < 2mAmps / 240VAC |
| Min Load | See Selection Chart |
| Power Factor @ FL | PF> 0.93 / 230VAC |
| | > 0.96 / 115VAC |

OUTPUT SPECIFICATIONS

| | |
|----------------------------|---|
| Voltage and Current | See Selection Chart |
| Line Regulation | ±0.5% |
| Load Regulation | See Selection Chart |
| Voltage Tolerance (Note 2) | ±2.0%: 3.3~15Volts(DC) |
| | ±1.0%: 24~48Volts(DC) |
| Ripple/Noise (Note 1) | See Selection Chart |
| Hold Up Time | 36mS @ FL |
| Setup, Rise Time | 600ms, 60m @ FL |
| Over Voltage Protection | 3.8 ~ 4.46Volt(DC): 3.3Volts(DC) |
| | 5.75 ~ 6.75Volt(DC): 5Volts(DC) |
| | 8.63 ~ 10.13Volt(DC): 7.5Volts(DC) |
| | 13.8 ~ 16.2Volt(DC): 12Volts(DC) |
| | 15.53 ~ 18.23Volt(DC): 13.5Volts(DC) |
| | 17.25 ~ 20.25Volt(DC): 15Volts(DC) |
| | 27.6 ~ 32.4Volt(DC): 24Volts(DC) |
| | 31.05 ~ 36.45Volt(DC): 27Volts(DC) |
| | 55.2 ~ 64.8Volt(DC): 48Volts(DC) |
| | Shut down o/p voltage, re-power |
| Over Current Protection | 105 ~ 150% rated output power |
| | Constant current limiting, auto-recover |
| DC Volt Adjust | See Selection Chart |

GENERAL SPECIFICATIONS

| | |
|-----------------------|--|
| Safety | UL60950-1, TUV EN60950-1 Approved |
| Insulation Resistance | ≥ 100MΩ / 500Volts(DC) |
| EMI | Compliance to EN55022 (CISPR22) Class B |
| Harmonic Current | Compliance to EN61000-3-2,-3 |
| Efficiency | See Selection Chart |
| Isolation | 3000VAC Input - Output |
| | 1500VAC Input - Ground |
| | 500VAC Output - Ground |
| EMS | Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN55024, light Industry Level, Criteria A |

ENVIRONMENTAL SPECIFICATIONS

| | |
|-------------------------|---|
| Oper. Temperature | -10°C to +60°C (See Derate Curve) |
| Storage Temperature | -20°C to +85°C, 10~95% RH |
| Relative Humidity | 20~90% RH non cond |
| Temperature Coefficient | ±0.05% / °C (0-50°C) |
| MTBF | 208.8KHrs min, MIL-HDBK-217F(25°C) |
| Vibration | 10~500Hz, 2G10min./1cycle, period for 60min. each along X, Y, Z axes |

PHYSICAL SPECIFICATIONS

| | |
|-------------|-----------------------|
| Size | |
| Millimeters | 179 x 97 x 33 |
| Inches | 7.05" x 3.82" x 1.30" |
| Weight | 20.46 oz (580g) |

NOTE

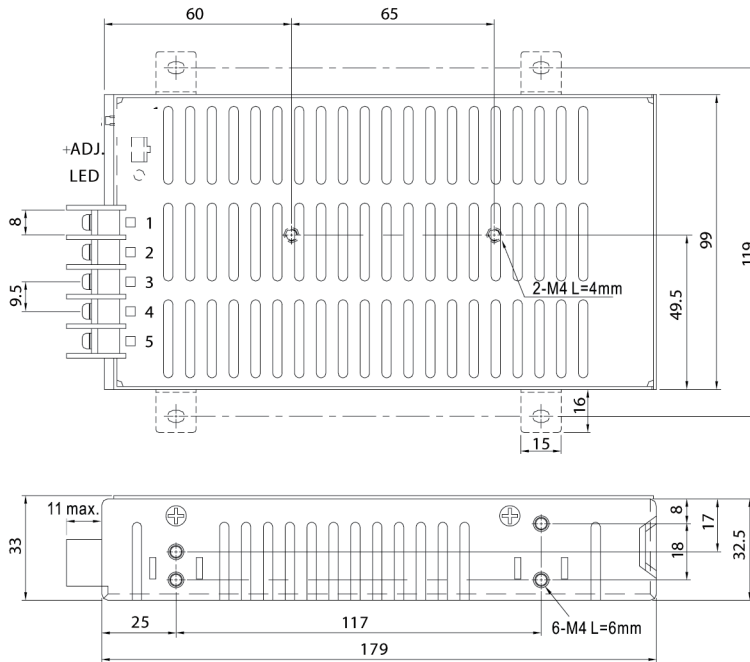
1. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
2. Tolerance : includes set up tolerance, line regulation and load regulation.
3. Derating may be needed under low input voltages. Please check the derating curve for more details.

All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

75W Single Output with PFC Function

Mechanical Specification

Case No. 920A Unit:mm

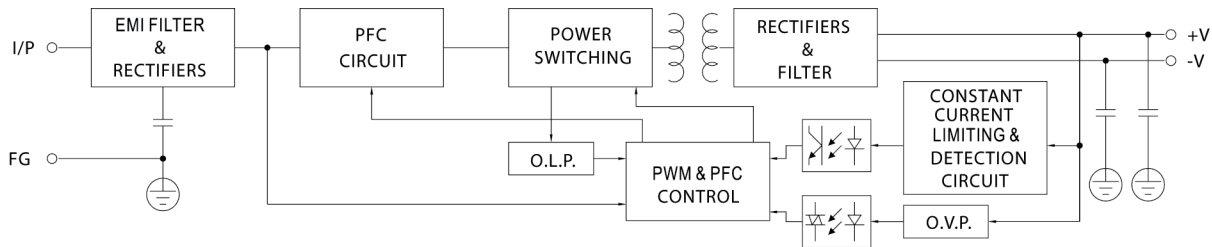


Terminal Pin No. Assignment

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

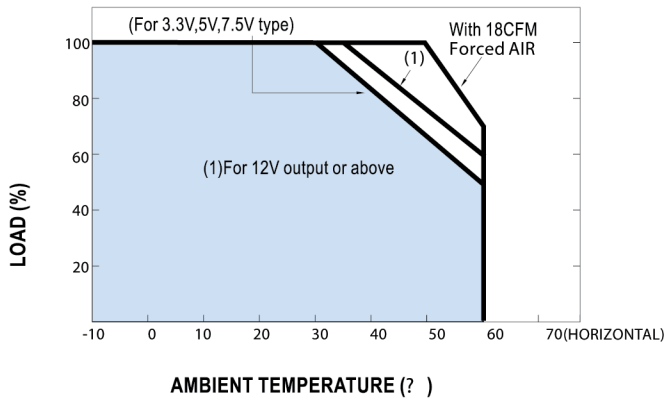
Block Diagram

PFC fosc : 67KHz
PWM fosc : 134KHz



75W Single Output with PFC Function

■ Derating Curve



■ Output Derating VS Input Voltage

