

- Universal AC input
- Protections: Short circuit/Over load/Over voltage
- Low leakage current <0.5mA
- Cooling by free air convection
- Fixed switching frequency at 65KHz



| Model Number         | Output Volts   | Output Amps | OVP                   | Min Load   | DC Volt Adjust     | Load Reg | Efficiency |
|----------------------|----------------|-------------|-----------------------|------------|--------------------|----------|------------|
| <b>SINGLE OUTPUT</b> |                |             |                       |            |                    |          |            |
| PS45-3.3             | 3.3 Volts(DC)  | 8 Amps      | 3.8 ~ 4.46Volt(DC)    | 0~10.7Amps | 3.14~3.63Volt(DC)  | ±3.0%    | 69%        |
| PS45-5               | 5 Volts(DC)    | 8 Amps      | 5.75 ~ 6.75Volt(DC)   | 0~10.5Amps | 4.75~5.5Volt(DC)   | ±3.0%    | 74%        |
| PS45-7.5             | 7.5 Volts(DC)  | 5.4 Amps    | 8.63 ~ 10.1Volt(DC)   | 0~7Amps    | 7.13~8.25Volt(DC)  | ±3.0%    | 75%        |
| PS45-12              | 12 Volts(DC)   | 3.7Amps     | 13.8 ~ 16.2Volt(DC)   | 0~4.4Amps  | 11.4~13.2Volt(DC)  | ±2.0%    | 76%        |
| PS45-13.5            | 13.5 Volts(DC) | 3.3 Amps    | 15.5 ~ 18.2Volt(DC)   | 0~3.9Amps  | 12.8~14.85Volt(DC) | ±2.0%    | 77%        |
| PS45-15              | 15 Volts(DC)   | 3.0 Amps    | 17.25 ~ 20.25Volt(DC) | 0~3.5Amps  | 14.25~16.5Volt(DC) | ±2.0%    | 77%        |
| PS45-24              | 24 Volts(DC)   | 1.9 Amps    | 27.6 ~ 32.4Volt(DC)   | 0~2.2Amps  | 22.8~26.4Volt(DC)  | ±2.0%    | 78%        |
| PS45-27              | 27 Volts(DC)   | 1.7 Amps    | 31 ~ 36.45Volt(DC)    | 0~1.95Amps | 25.65~29.7Volt(DC) | ±2.0%    | 78%        |
| PS45-48              | 48 Volts(DC)   | 1.0 Amps    | 55.2~ 64.8Volt(DC)    | 0~1.1Amps  | 45.6~52.8Volt(DC)  | ±2.0%    | 78%        |

**45W Single Output Switching Power Supply**

**INPUT SPECIFICATIONS**

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| Input Voltage Range               | 90 ~ 264VAC 127~370 Volts(DC)       |
| Frequency Range                   | 47-440Hz                            |
| Inrush Current, typ: (cold start) | 15Amps/115VAC; 30Amps/230VAC        |
| Input Current                     | 0.8 Amps@115VAC<br>0.56 Amps@230VAC |
| Leakage current                   | < 0.75mAmps / 240VAC                |
| Min Load                          | See Selection Chart                 |

**OUTPUT SPECIFICATIONS**

|                            |  |
|----------------------------|--|
| Voltage and Current        | See Selection Chart  |
| Line Regulation            | ±1.0%  |
| Load Regulation            | See Selection Chart  |
| Voltage Tolerance (Note 2) | 3.0%: 3.3~7.5Volts(DC)<br>2.0%: 12~48Volts(DC)                               |
| Ripple/Noise (Note 1)      | 80mVpk-pk: 3.3Volts(DC)<br>100mVpk-pk: 5~48Volts(DC)                         |
| Hold Up Time @ FL          | 60mS   |
| Setup, Rise Time @ FL      | 800mS, 30mS  |
| Over Voltage Protection    | See Selection Chart<br>Shut down o/p voltage, re-power                       |
| Over Current Protection    | 53~75W (3.3Volts: 36~55W) rated<br>output power<br>Hiccup mode, auto recover |
| DC Voltage Adjust          | See Selection Chart  |

**GENERAL SPECIFICATIONS**

|                       |  |
|-----------------------|--|
| Safety                | UL60950,<br>TUV EN60950-1 Approved         |
| Insulation Resistance | ≥ 100MΩ / 500Volts(DC)                     |
| EMI                   | Compliance to EN55022 (CISPR22)<br>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<br>EN61000-4-2,3,4,5,6,8,11<br>ENV50204, ENV55024<br>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                    | 300.7KHrs min, MIL-HDBK-217F(25°C)                                      |
| Vibration               | 10~500Hz, 2G10min./1cycle, period for<br>60min. each along X, Y, Z axes |

**PHYSICAL SPECIFICATIONS**

|        |                                    |
|--------|------------------------------------|
| Size   | 127 x 76.2 x 28 mm (5"x 3"x 1.10") |
| Weight | 7.48 oz (190g)                     |

**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. Mounting holes M1 and M2 should be grounded for EMI purposes.

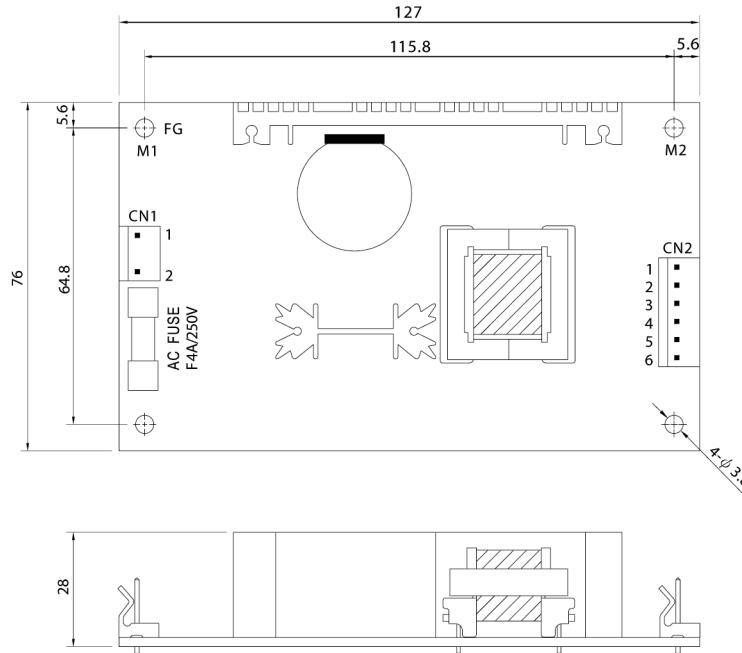
*All specifications are typical at nominal input, full load, and 25°C unless otherwise noted*

## 45W Single Output Switching Power Supply

## PS45 series

### Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 5277-02 or equivalent

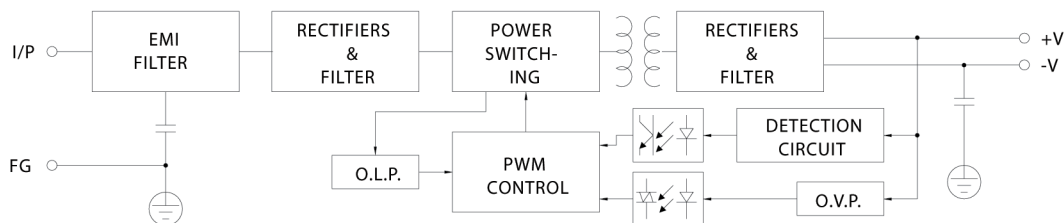
| Pin No. | Assignment | Mating Housing           | Terminal                 |
|---------|------------|--------------------------|--------------------------|
| 1       | AC/N       | Molex 5195 or equivalent | Molex 5194 or equivalent |
| 2       | AC/L       | Molex 5195 or equivalent | Molex 5194 or equivalent |

DC Output Connector (CN2) : Molex 5273-06 or equivalent

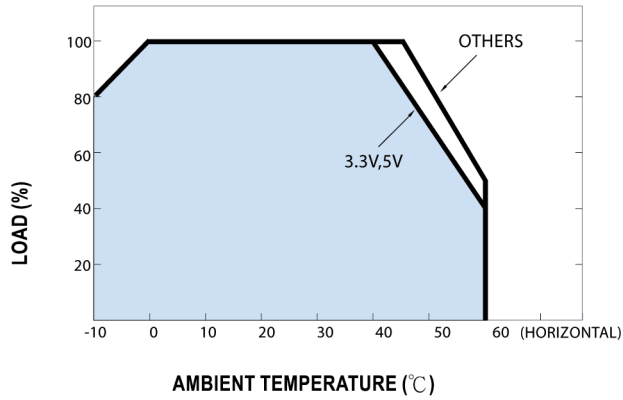
| Pin No. | Assignment | Mating Housing           | Terminal                 |
|---------|------------|--------------------------|--------------------------|
| 1,2,3   | +V         | Molex 5195 or equivalent | Molex 5194 or equivalent |
| 4,5,6   | -V         | Molex 5195 or equivalent | Molex 5194 or equivalent |

### Block Diagram

fosc : 65KHz



■ Derating Curve



■ Static Characteristics (12V)

