

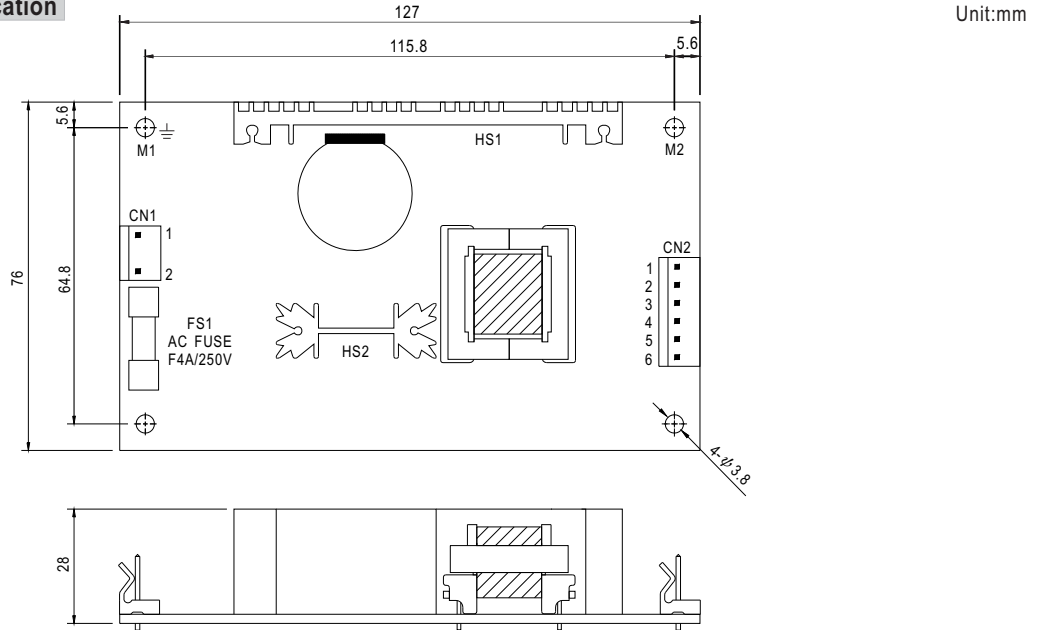
- Features :
  - Universal AC input/Full range
  - Low leakage current<0.75mA
  - Protections: Short circuit / Overload / Over voltage
  - Cooling by free air convection
  - 100% full load burn-in test
  - Fixed switching frequency at 65KHz
  - 2 years warranty



**SPECIFICATION**

| MODEL                 | PS-45-3.3  | PS-45-5   | PS-45-7.5    | PS-45-12             | PS-45-13.5   | PS-45-15      | PS-45-24       | PS-45-27     | PS-45-48      |              |          |
|-----------------------|--|---|--------------|----------------------|--------------|---------------|----------------|--------------|---------------|--------------|----------|
| OUTPUT                | DC VOLTAGE   | 3.3V  | 5V           | 7.5V                 | 12V          | 13.5V         | 15V            | 24V          | 27V           | 48V          |          |
|                       | RATED CURRENT  | 8A  | 8A           | 5.4A                 | 3.7A         | 3.3A          | 3A             | 1.9A         | 1.7A          | 1A           |          |
|                       | CURRENT RANGE  | 0 ~ 10.7A   | 0 ~ 10.5A    | 0 ~ 7A               | 0 ~ 4.4A     | 0 ~ 3.9A      | 0 ~ 3.5A       | 0 ~ 2.2A     | 0 ~ 1.95A     | 0 ~ 1.1A     |          |
|                       | RATED POWER  | 26.4W   | 40W          | 40.5W                | 44.4W        | 44.55W        | 45W            | 45.6W        | 45.9W         | 48W          |          |
|                       | OUTPUT POWER (max.)  | Rated output power for convection; 52W (+3.3V : 35W) with 18 CFM min.   |              |                      |              |               |                |              |               |              |          |
|                       | RIPPLE & NOISE (max.) Note.2   | 80mVp-p   | 100mVp-p     | 100mVp-p             | 100mVp-p     | 100mVp-p      | 100mVp-p       | 100mVp-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 ~ 14.85V | 14.25 ~ 16.5V  | 22.8 ~ 26.4V | 25.65 ~ 29.7V | 45.6 ~ 52.8V |          |
|                       | VOLTAGE TOLERANCE Note.3   | ±3.0%   | ±3.0%        | ±3.0%                | ±2.0%        | ±2.0%         | ±2.0%          | ±2.0%        | ±2.0%         | ±2.0%        |          |
|                       | LINE REGULATION  | ±1.0%   | ±1.0%        | ±1.0%                | ±1.0%        | ±1.0%         | ±1.0%          | ±1.0%        | ±1.0%         | ±1.0%        |          |
|                       | LOAD REGULATION  | ±3.0%   | ±3.0%        | ±3.0%                | ±2.0%        | ±2.0%         | ±2.0%          | ±2.0%        | ±2.0%         | ±2.0%        |          |
| SETUP, RISE TIME      | 800ms, 30ms at full load   |   |              |                      |              |               |                |              |               |              |          |
| HOLD UP TIME (Typ.)   | 60ms at full load  |   |              |                      |              |               |                |              |               |              |          |
| INPUT                 | VOLTAGE RANGE  | 90 ~ 264VAC   |              | 127 ~ 370VDC         |              |               |                |              |               |              |          |
|                       | FREQUENCY RANGE  | 47 ~ 440Hz  |              |                      |              |               |                |              |               |              |          |
|                       | EFFICIENCY(Typ.)   | 69%   | 74%          | 75%                  | 76%          | 77%           | 77%            | 78%          | 78%           | 78%          |          |
|                       | AC CURRENT (Typ.)  | 0.8A/115VAC   |              | 0.56A/230VAC         |              |               |                |              |               |              |          |
|                       | INRUSH CURRENT (Typ.)  | COLD START 15A/115VAC   |              | 30A/230VAC           |              |               |                |              |               |              |          |
| LEAKAGE CURRENT       | <0.75mA / 240VAC   |   |              |                      |              |               |                |              |               |              |          |
| PROTECTION            | OVERLOAD   | 53 ~ 75W(3.3V : 36 ~ 55W) rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed. |              |                      |              |               |                |              |               |              |          |
|                       | OVER VOLTAGE   | 3.8 ~ 4.46V   | 5.75 ~ 6.75V | 8.63 ~ 10.1V         | 13.8 ~ 16.2V | 15.5 ~ 18.2V  | 17.25 ~ 20.25V | 27.6 ~ 32.4V | 31 ~ 36.45V   | 55.2 ~ 64.8V |          |
|                       |  | Protection type : Hiccup mode, recovers automatically after fault condition is removed.   |              |                      |              |               |                |              |               |              |          |
| ENVIRONMENT           | WORKING TEMP.  | -10 ~ +60°C (Refer to "Derating Curve")   |              |                      |              |               |                |              |               |              |          |
|                       | WORKING HUMIDITY   | 20 ~ 90% RH non-condensing  |              |                      |              |               |                |              |               |              |          |
|                       | STORAGE TEMP., HUMIDITY  | -20 ~ +85°C, 10 ~ 95% RH  |              |                      |              |               |                |              |               |              |          |
|                       | TEMP. COEFFICIENT  | ±0.05%/°C (0 ~ 50°C)  |              |                      |              |               |                |              |               |              |          |
|                       | VIBRATION  | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes   |              |                      |              |               |                |              |               |              |          |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS   | UL62368-1, TUV EN62368-1 approved   |              |                      |              |               |                |              |               |              |          |
|                       | WITHSTAND VOLTAGE  | I/P-O/P:3KVAC   |              | I/P-FG:2KVAC         |              |               | O/P-FG:0.5KVAC |              |               |              |          |
|                       | ISOLATION RESISTANCE   | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH  |              |                      |              |               |                |              |               |              |          |
|                       | EMC EMISSION   | Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3   |              |                      |              |               |                |              |               |              |          |
|                       | EMC IMMUNITY   | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A   |              |                      |              |               |                |              |               |              |          |
| OTHERS                | MTBF   | 300.7K hrs min.   |              | MIL-HDBK-217F (25°C) |              |               |                |              |               |              |          |
|                       | DIMENSION  | 127*76*28mm (L*W*H)   |              |                      |              |               |                |              |               |              |          |
|                       | PACKING  | 0.19Kg; 72pcs/15.6Kg/1.35CUFT   |              |                      |              |               |                |              |               |              |          |
| 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.<br>4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )<br>5. Mounting holes M1 and M2 should be grounded for EMI purposes.<br>6. Heat Sink HS1,HS2 can not be shorted. |   |              |                      |              |               |                |              |               |              |          |

**Mechanical Specification**



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       |                          |                          |

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

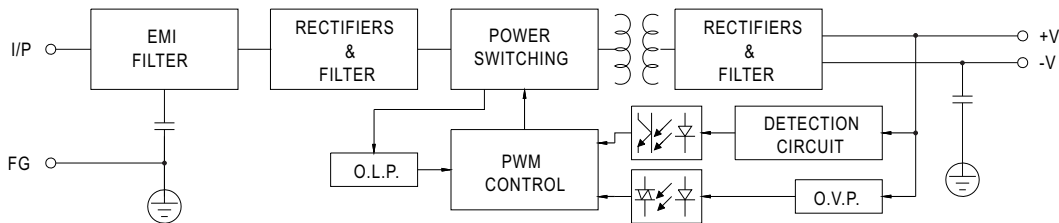
| Pin No. | Assignment | Mating Housing           | Terminal                 |
|---------|------------|--------------------------|--------------------------|
| 1,2,3   | +V         | Molex 5195 or equivalent | Molex 5194 or equivalent |
| 4,5,6   | -V         |                          |            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

⊥ : Grounding Required

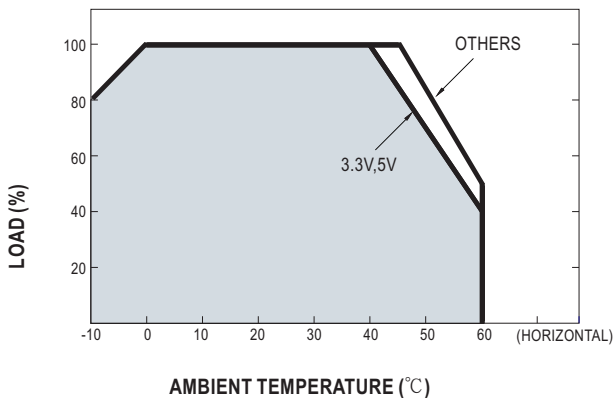
- ⚠ 1.HS1,HS2 cannot be shorted
- 2.M1 is safety ground

**Block Diagram**

fosc : 65KHz



**Derating Curve**



**Static Characteristics (12V)**

