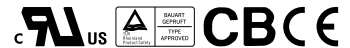




■ Features :

- Universal AC input/Full range
- Low leakage current<0.5mA
- Protections:Short circuit/Over load/Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 65KHz
- 2 years warranty

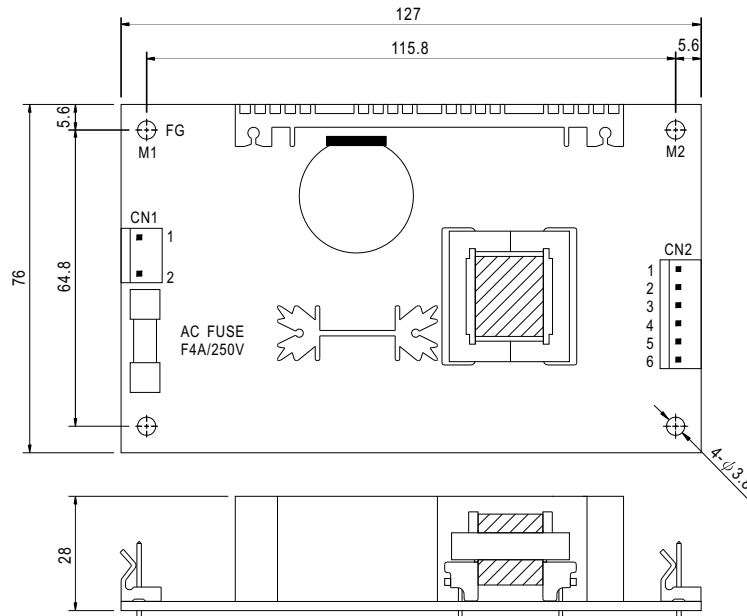


### SPECIFICATION

| MODEL                 |   | PT-45A   |            |             | PT-45B     |            |          | PT-45C   |            |          |
|-----------------------|---|--|------------|-------------|------------|------------|----------|----------|------------|----------|
| OUTPUT                | OUTPUT NUMBER   | CH1  | CH2        | CH3         | CH1        | CH2        | CH3      | CH1      | CH2        | CH3      |
|                       | DC VOLTAGE  | 5V   | 12V        | -5V         | 5V         | 12V        | -12V     | 5V       | 15V        | -15V     |
|                       | RATED CURRENT   | 3A   | 2A         | 0.3A        | 3A         | 2A         | 0.3A     | 3A       | 1.6A       | 0.3A     |
|                       | CURRENT RANGE   | 0.4 ~ 5A   | 0.2 ~ 2.5A | 0 ~ 0.5A    | 0.4 ~ 5A   | 0.2 ~ 2.5A | 0 ~ 0.5A | 0.4 ~ 5A | 0.2 ~ 2.3A | 0 ~ 0.5A |
|                       | RATED POWER   | 40.5W  |            |             | 42.6W      |            |          | 43.5W    |            |          |
|                       | OUTPUT POWER (max.)   | Rated output power for convection; 52W with 18CFM min. Forced air  |            |             |            |            |          |          |            |          |
|                       | RIPPLE & NOISE (max.) Note.2  | 50mVp-p  | 120mVp-p   | 50mVp-p     | 50mVp-p    | 120mVp-p   | 100mVp-p | 50mVp-p  | 120mVp-p   | 100mVp-p |
|                       | VOLTAGE ADJ. RANGE  | CH1:4.75 ~ 5.5V  |            |             |            |            |          |          |            |          |
|                       | VOLTAGE TOLERANCE Note.3  | ±4.0%  | ±7.0%      | ±5.0%       | ±4.0%      | ±7.0%      | ±5.0%    | ±4.0%    | ±7.0%      | ±5.0%    |
|                       | LINE REGULATION   | ±1.0%  | ±2.0%      | ±1.0%       | ±1.0%      | ±2.0%      | ±1.0%    | ±1.0%    | ±2.0%      | ±1.0%    |
|                       | LOAD REGULATION   | ±3.0%  | ±4.0%      | ±1.0%       | ±3.0%      | ±4.0%      | ±1.0%    | ±3.0%    | ±4.0%      | ±1.0%    |
|                       | SETUP, RISE TIME  | 800ms, 20ms at full load   |            |             |            |            |          |          |            |          |
| HOLD TIME (Typ.)      | 60ms at full load   |  |            |             |            |            |          |          |            |          |
| INPUT                 | VOLTAGE RANGE   | 90 ~ 264VAC  |            | 127 ~370VDC |            |            |          |          |            |          |
|                       | FREQUENCY RANGE   | 47 ~ 440Hz   |            |             |            |            |          |          |            |          |
|                       | EFFICIENCY (Typ.)   | 75%  |            |             | 75%        |            |          | 75%      |            |          |
|                       | AC CURRENT (Typ.)   | 1A/115VAC  |            | 0.7A/230VAC |            |            |          |          |            |          |
|                       | INRUSH CURRENT (Typ.)   | COLD START 15A/115VAC  |            |             | 30A/230VAC |            |          |          |            |          |
|                       | LEAKAGE CURRENT   | <0.5mA   |            |             |            |            |          |          |            |          |
| PROTECTION            | OVER LOAD   | 53 ~ 75W rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed. |            |             |            |            |          |          |            |          |
|                       | OVER VOLTAGE  | CH1: 5.75 ~ 6.75VDC<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed.         |            |             |            |            |          |          |            |          |
| 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   | ±0.04%/°C (0 ~ 50°C) on +5V output   |            |             |            |            |          |          |            |          |
|                       | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, Period for 60min.each along X, Y, Z axes   |            |             |            |            |          |          |            |          |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS  | UL60950, TUV EN60950-1 Approved  |            |             |            |            |          |          |            |          |
|                       | WITHSTAND VOLTAGE   | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC 1min.  |            |             |            |            |          |          |            |          |
|                       | 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  | 288.1K hrs min. MIL-HDBK-217F (25°C)   |            |             |            |            |          |          |            |          |
|                       | DIMENSION   | 127*76*28mm (L*W*H)  |            |             |            |            |          |          |            |          |
|                       | PACKING   | 0.21Kg; 72pcs/17Kg/1.35CUFT  |            |             |            |            |          |          |            |          |
| NOTE                  | <ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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.</li> <li>5. Mounting holes M1 and M2 should be grounded for EMI purposes.</li> </ol> |  |            |             |            |            |          |          |            |          |

**Mechanical Specification**

Unit:mm



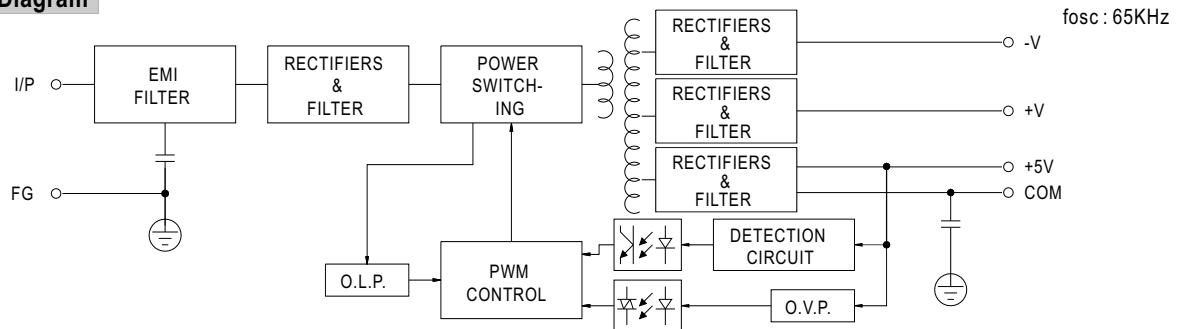
AC Input Connector (CN1) : Molex 5277-02 or equivalent

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

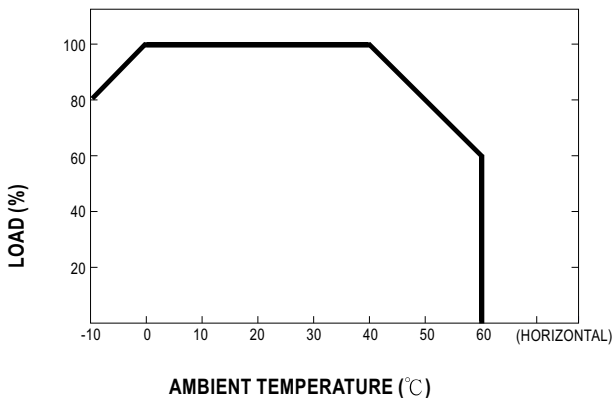
DC Output Connector (CN2) : Molex 5273-06 or equivalent

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

**Block Diagram**



**Output Derating**



**Static Characteristics (B)**

