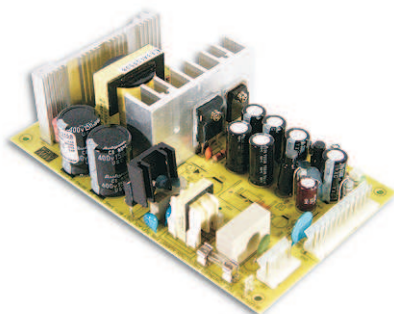
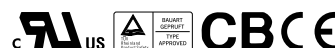




#### ■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- With power good signal output(Optional)
- 100% full load burn-in test
- Fixed switching frequency at 45KHz
- 2 years warranty

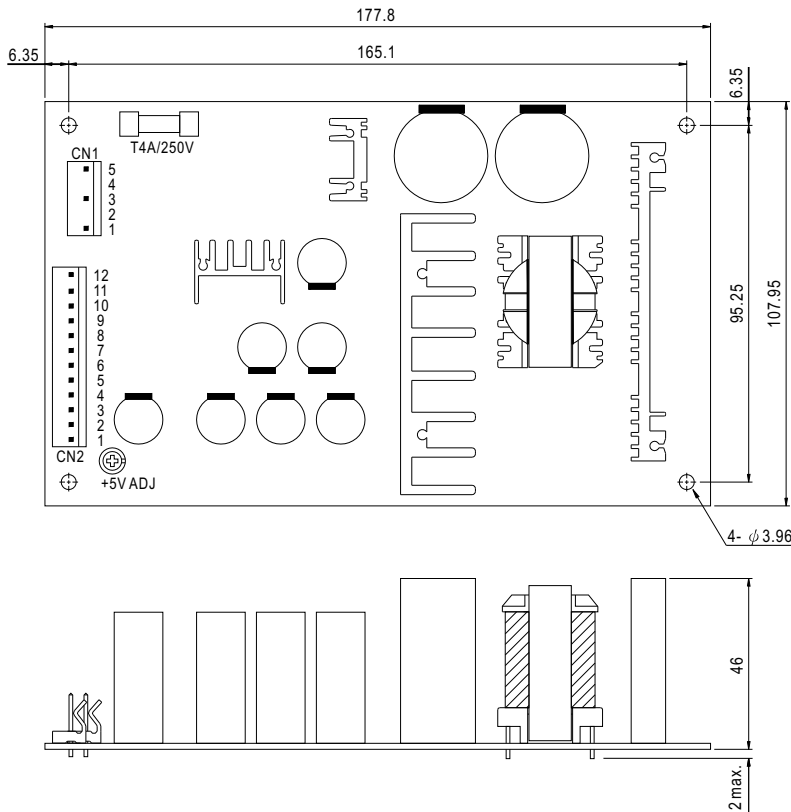


#### SPECIFICATION

| MODEL                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | PD-110A                                                                                                                  |            | PD-110B         |            |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------|-----------------|------------|
| OUTPUT                   | OUTPUT NUMBER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CH1                                                                                                                      | CH2        | CH1             | CH2        |
|                          | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 5V                                                                                                                       | 12V        | 5V              | 24V        |
|                          | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 5A                                                                                                                       | 6.5A       | 5A              | 3.5A       |
|                          | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0.5 ~ 5A                                                                                                                 | 0.5 ~ 6.5A | 0.5 ~ 5A        | 0.5 ~ 3.5A |
|                          | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 103W                                                                                                                     |            | 109W            |            |
|                          | RIPPLE & NOISE (max.) Note.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 100mVp-p                                                                                                                 | 150mVp-p   | 100mVp-p        | 200mVp-p   |
|                          | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CH1:4.75 ~ 5.5V                                                                                                          |            | CH1:4.75 ~ 5.5V |            |
|                          | VOLTAGE TOLERANCE Note.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ±2.0%                                                                                                                    | ±6.0%      | ±2.0%           | ±6.0%      |
|                          | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ±1.0%                                                                                                                    | ±2.0%      | ±1.0%           | ±2.0%      |
|                          | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ±1.0%                                                                                                                    | ±5.0%      | ±1.0%           | ±5.0%      |
| SETUP, RISE TIME         | 1200ms, 50ms at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                          |            |                 |            |
| HOLD UP TIME (Typ.)      | 80ms at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                          |            |                 |            |
| INPUT                    | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 100 ~ 264VAC      141 ~370VDC (90 ~ 100VAC 90% load max.)                                                                |            |                 |            |
|                          | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 47 ~ 63Hz                                                                                                                |            |                 |            |
|                          | EFFICIENCY(Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 75%                                                                                                                      |            | 78%             |            |
|                          | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3A/115VAC      1.5A/230VAC                                                                                               |            |                 |            |
|                          | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | COLD START 40A                                                                                                           |            |                 |            |
|                          | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <1mA/240VAC                                                                                                              |            |                 |            |
| PROTECTION               | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 105% ~ 135% 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 ~ +50℃, 60 ℃ with cooling fan(Refer to output load derating curve)                                                   |            |                 |            |
|                          | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 20 ~ 90% RH non-condensing                                                                                               |            |                 |            |
|                          | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -20 ~ +85℃, 10 ~ 95% RH                                                                                                  |            |                 |            |
|                          | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ±0.03%/℃ (0 ~ 50℃)                                                                                                       |            |                 |            |
|                          | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                  |            |                 |            |
| SAFETY & EMC<br>(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                                                                                             |            |                 |            |
|                          | EMS IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Compliance to EN61000-4-2,3,4,5,6,11; ENV50204, light industry level, criteria A                                         |            |                 |            |
| OTHERS                   | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 323K hrs min.      MIL-HDBK-217F (25℃)                                                                                   |            |                 |            |
|                          | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 177.8*107.95*46mm (L*W*H)                                                                                                |            |                 |            |
|                          | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.51Kg; 24pcs/13.1Kg/1.19CUFT                                                                                            |            |                 |            |
| NOTE                     | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ 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. The final equipment must be re-confirmed that it still meets EMC directives. |                                                                                                                          |            |                 |            |

## Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 5273-05 or equivalent

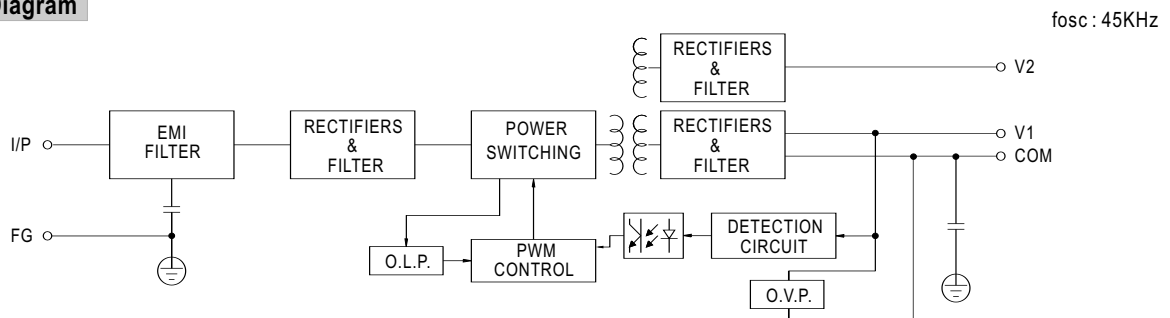
| Pin No. | Assignment | Mating Housing           | Terminal                 |
|---------|------------|--------------------------|--------------------------|
| 1       | FG $\perp$ | Molex 5195 or equivalent | Molex 5194 or equivalent |
| 2,4     | No Pin     |                          |                          |
| 3       | AC/N       |                          |                          |
| 5       | AC/L       |                          |                          |

DC Output Connector (CN2) : Molex 5273-12 or equivalent

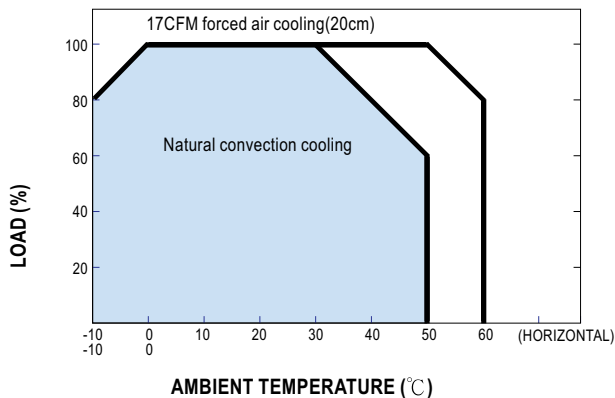
| Pin No. | Assignment   | Mating Housing           | Terminal                 |
|---------|--------------|--------------------------|--------------------------|
| 1,2,3   | V1           | Molex 5195 or equivalent | Molex 5194 or equivalent |
| 4,5,6,7 | COM          |                          |                          |
| 8,9,10  | V2           |                          |                          |
| 11,12   | V3(Optional) |                          |                          |

| MODEL          | PD-110A | PD-110B |
|----------------|---------|---------|
| Pin No. 1,2,3  | +5V     | +5V     |
| Pin No. 8,9,10 | +12V    | +24V    |

## Block Diagram



## Derating Curve



## Static Characteristics (A)

