



## 25W Single Output LED Power Supply

# PLD-25 series



### ■ Features :

- Universal AC input / Full range (up to 295VAC)
- Built-in active PFC function
- Constant current design
- Protections: Short circuit / Over temperature
- Cooling by free air convection
- Fully isolated plastic case
- Class II power unit, no FG
- 100% full load burn-in test
- Low cost
- High reliability
- Suitable for dry / damp locations
- 3 years warranty

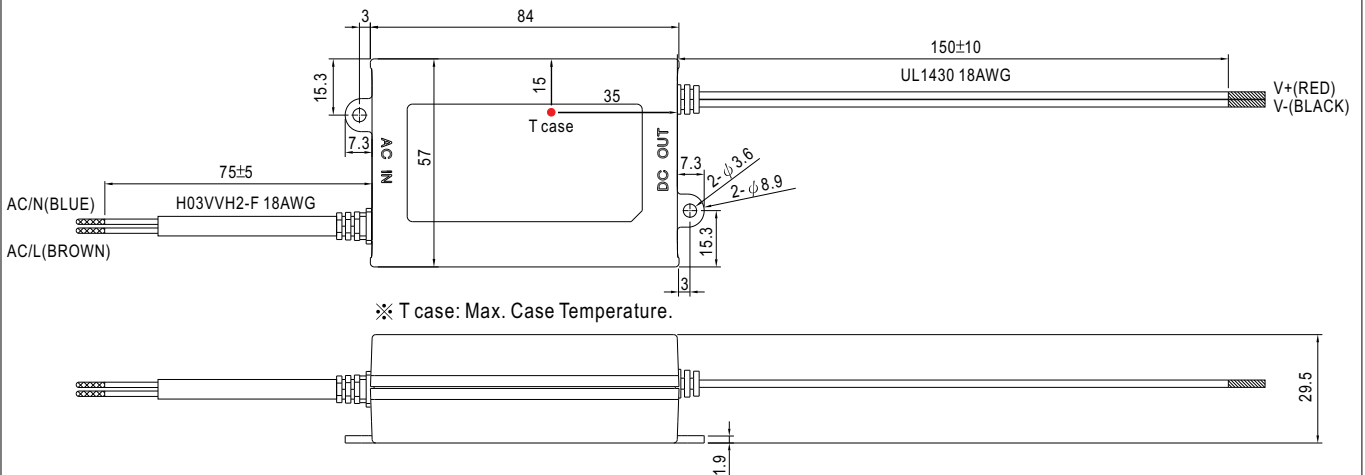
### SPECIFICATION



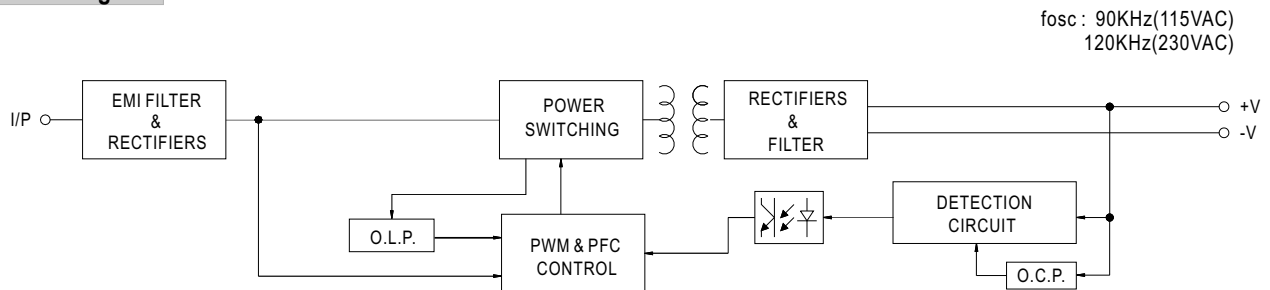
| MODEL           | PLD-25-350   | PLD-25-700  | PLD-25-1050 | PLD-25-1400 |            |
|-----------------|--|---|-------------|-------------|------------|
| OUTPUT          | RATED CURRENT  | 350mA   | 700mA       | 1050mA      | 1400mA     |
|                 | OPERATING VOLTAGE RANGE  | 36 ~ 58V  | 24 ~ 36V    | 16 ~ 24V    | 12 ~ 18V   |
|                 | CURRENT RANGE  | 0 ~ 350mA   | 0 ~ 700mA   | 0 ~ 1050mA  | 0 ~ 1400mA |
|                 | CURRENT ACCURACY   | ±5.0%   |             |             |            |
|                 | RATED POWER  | 20.3W   | 25.2W       | 25.2W       | 25.2W      |
|                 | RIPPLE & NOISE (max.) Note.1   | 4.6Vp-p   | 2.7Vp-p     | 2.2Vp-p     | 2Vp-p      |
|                 | NO LOAD OUTPUT VOLTAGE (max.)  | 63V   | 50V         | 35V         | 25V        |
| SETUP TIME      | 1500ms / 230VAC 3000ms / 115VAC at full load   |   |             |             |            |
| INPUT           | VOLTAGE RANGE  | 90 ~ 295VAC 127 ~ 417VDC  |             |             |            |
|                 | FREQUENCY RANGE  | 47 ~ 63Hz   |             |             |            |
|                 | POWER FACTOR (Typ.)  | PF>0.98/115VAC, PF>0.92/230VAC, PF>0.91/277VAC at full load (Please refer to "Power Factor Characteristic" curve) |             |             |            |
|                 | EFFICIENCY (Typ.)  | 85%   | 86%         | 85%         | 84%        |
|                 | AC CURRENT (Typ.)  | 0.6A/115VAC 0.3A/230VAC   |             |             |            |
|                 | INRUSH CURRENT(max.)   | 40A/230VAC  |             |             |            |
| LEAKAGE CURRENT | <0.5mA / 240VAC  |   |             |             |            |
| PROTECTION      | SHORT CIRCUIT  | Hiccup mode, recovers automatically after fault condition is removed.   |             |             |            |
|                 | OVER TEMPERATURE   | 95°C ±10°C (RTH1)<br>Protection type : Shut down o/p voltage, re-power on to recover                              |             |             |            |
| ENVIRONMENT     | WORKING TEMP.  | -30 ~ +60°C (Refer to "Derating Curve")   |             |             |            |
|                 | WORKING HUMIDITY   | 20 ~ 95% RH non-condensing  |             |             |            |
|                 | STORAGE TEMP., HUMIDITY  | -40 ~ +80°C, 10 ~ 95% RH  |             |             |            |
|                 | TEMP. COEFFICIENT  | ±0.03%/°C (0 ~ 50°C)  |             |             |            |
|                 | VIBRATION  | 10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes   |             |             |            |
| SAFETY & EMC    | SAFETY STANDARDS   | Design refer to UL8750, TUV EN61347-1, EN61347-2-13   |             |             |            |
|                 | WITHSTAND VOLTAGE  | I/P-O/P:3.75KVAC  |             |             |            |
|                 | ISOLATION RESISTANCE   | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH  |             |             |            |
|                 | EMC EMISSION   | Compliance to EN55015, EN61000-3-2 Class C (≥ 75% load) ; EN61000-3-3, FCC part18 Class A                         |             |             |            |
| EMC IMMUNITY    | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024,EN61547, light industry level, criteria A  |   |             |             |            |
| OTHERS          | MTBF   | 968.6Khrs min. MIL-HDBK-217F (25°C)   |             |             |            |
|                 | DIMENSION  | 84*57*29.5mm (L*W*H)  |             |             |            |
|                 | PACKING  | 0.19Kg; 72pcs/14.7Kg/0.75CUFT   |             |             |            |
| 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.<br>2. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers. |   |             |             |            |

**Mechanical Specification**

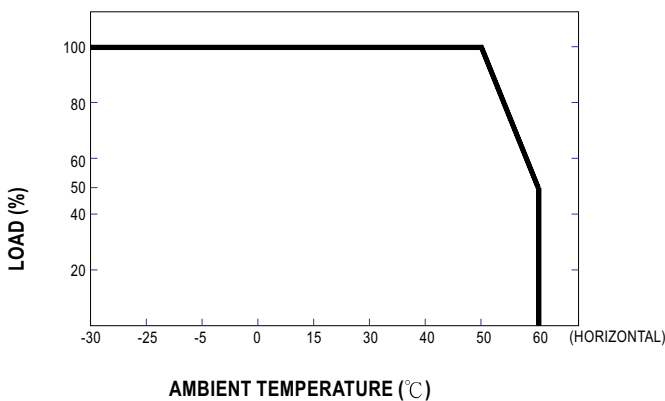
Case No.PCD16A Unit:mm



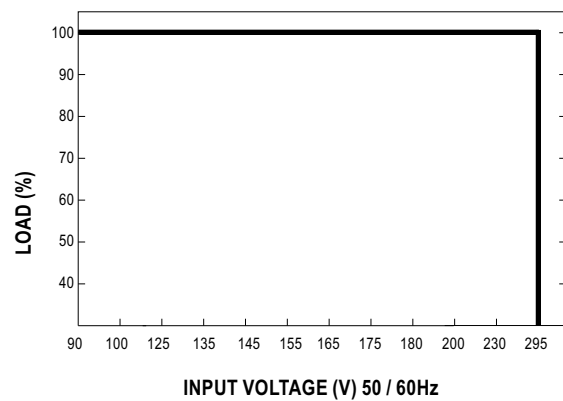
**Block Diagram**



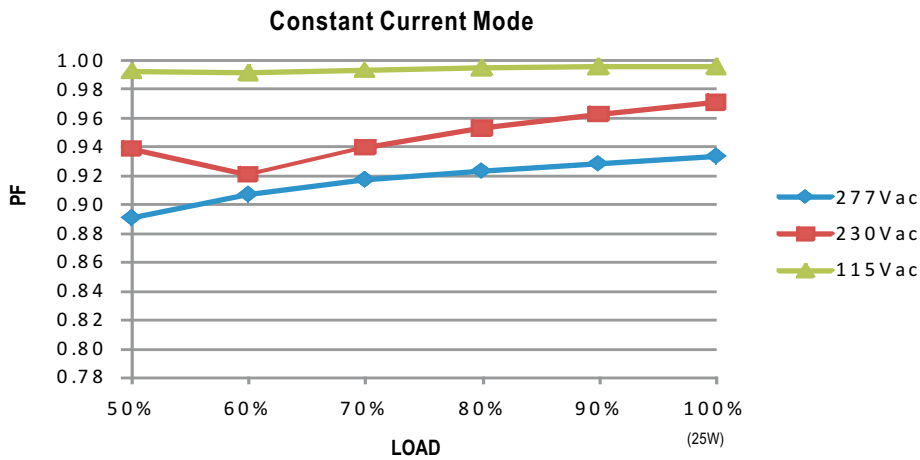
**Derating Curve**



**Static Characteristics**



**Power Factor Characteristic**



**EFFICIENCY vs LOAD (PLD-25-700)**

PLD-25 series possess superior working efficiency that up to 86% can be reached in field applications.

