



## ■ 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 2 Power Unit
- Class II power unit, no FG
- IP30 design
- 100% full load burn-in test
- Low cost
- High reliability
- Suitable for dry / damp locations
- 3 years warranty

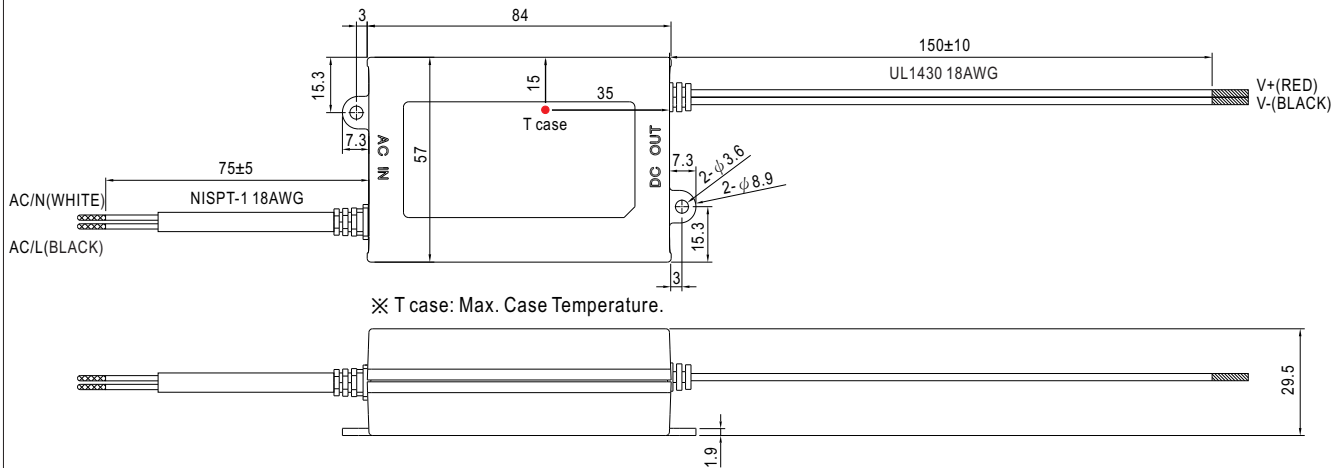
## SPECIFICATION



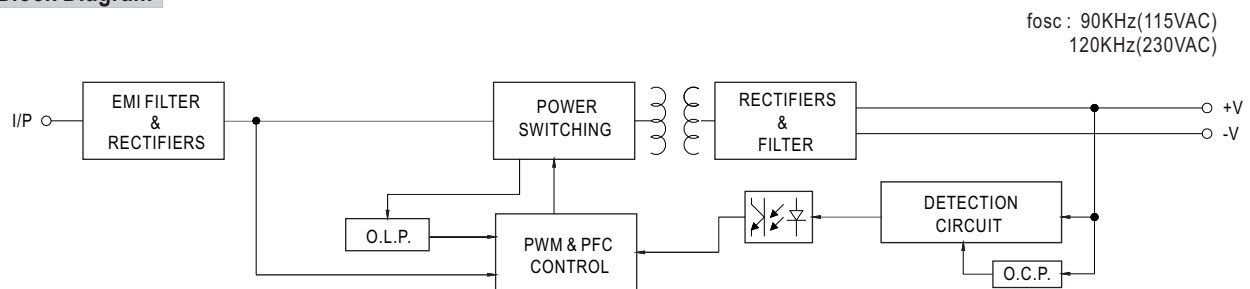
| MODEL        |                                                                                                                                                                                                                                          | PLD-25-350                                                                                                                                                                        | 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 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    0.2A/277VAC                                                                                                                                         |            |             |             |
|              | INRUSH CURRENT(Typ.)                                                                                                                                                                                                                     | COLD START 15A(twidth=75μs measured at 50% Ipeak) at 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                                                                                                                                                                                                                         | UL8750, CSA C22.2 No. 250.0-08(except for PLD-25-350, PLD-25-700), ENEC EN 61347-1, EN 61347-2-13 independent, EN 62384, IP30 approved ; design refer to UL60950-1, TUV EN60950-1 |            |             |             |
|              | 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 (AII 75% load) ; EN61000-3-3, FCC part 18 non-consumer equipment                                                                       |            |             |             |
| OTHERS       | EMC IMMUNITY                                                                                                                                                                                                                             | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024,EN61547, light industry level, criteria A                                                                                         |            |             |             |
|              | MTBF                                                                                                                                                                                                                                     | 968.6Khrs min.    MIL-HDBK-217F (25°C)                                                                                                                                            |            |             |             |
|              | DIMENSION                                                                                                                                                                                                                                | 84*57*29.5mm (L*W*H)                                                                                                                                                              |            |             |             |
| NOTE         | PACKING                                                                                                                                                                                                                                  | 0.19Kg; 72pcs/14.7Kg/0.75CUFT                                                                                                                                                     |            |             |             |
|              | 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

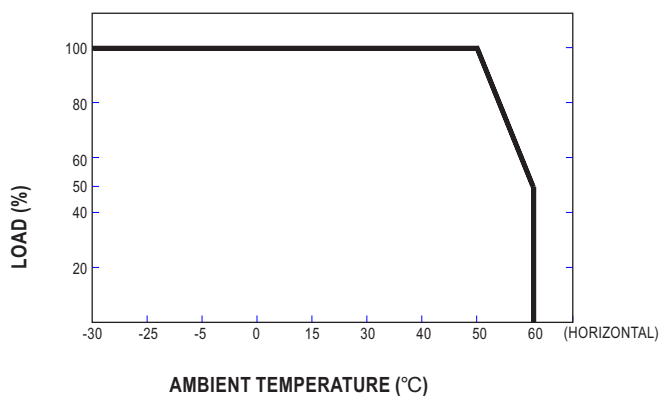
Case No. PCD16A Unit:mm



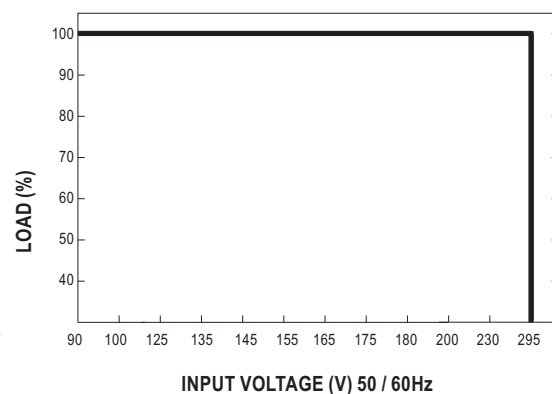
## Block Diagram



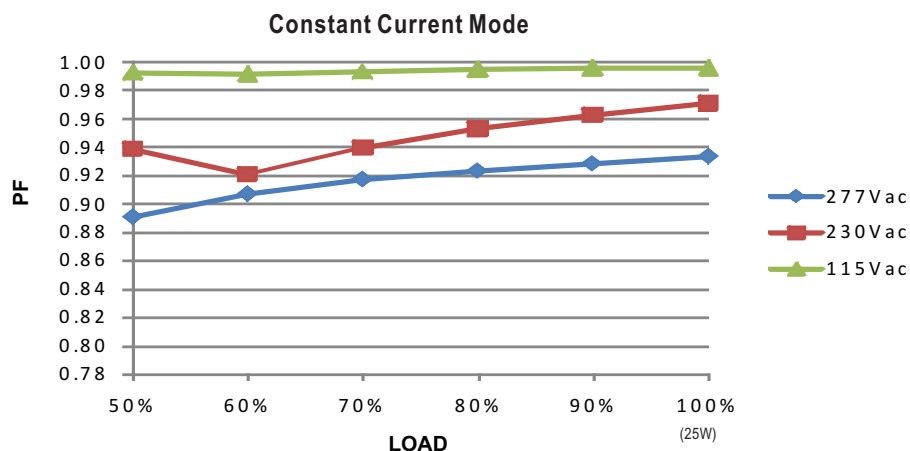
## Derating Curve



## 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.

