



16W Single Output LED Power Supply

PLD-16 series



■ Features :

- 115VAC or 230VAC models available
- 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
- Suitable for indoor LED lighting applications
- 100% full load burn-in test
- Low cost
- High reliability
- 3 years warranty



PLD-16-350 **A** A : With AC input 90~ 135VAC.
 B : With AC input 180~ 295VAC.

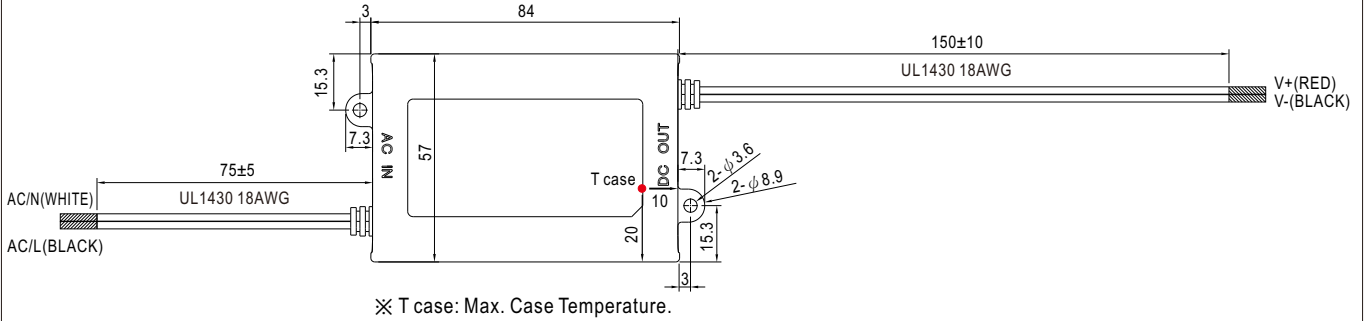
SPECIFICATION

| MODEL | PLD-16-350 <input type="checkbox"/> | PLD-16-700 <input type="checkbox"/> | PLD-16-1050 <input type="checkbox"/> | PLD-16-1400 <input type="checkbox"/> | | |
|----------------------|--|---|--------------------------------------|--------------------------------------|---------|-------|
| OUTPUT | RATED CURRENT | 350mA | 700mA | 1050mA | 1400mA | |
| | OPERATING VOLTAGE RANGE | 24 ~ 48V | 16 ~ 24V | 12 ~ 16V | 8 ~ 12V | |
| | CURRENT ACCURACY | ±5.0% | | | | |
| | RATED POWER | 16.8W | 16.8W | 16.8W | 16.8W | |
| | RIPPLE & NOISE (max.) Note.1 | 4.6Vp-p | 2.7Vp-p | 2.2Vp-p | 2Vp-p | |
| | NO LOAD OUTPUT VOLTAGE (max.) | 63V | 35V | 25V | 16V | |
| | SETUP TIME | 1000ms / 230VAC 2000ms / 115VAC at full load | | | | |
| INPUT | FREQUENCY RANGE | 47 ~ 63Hz | | | | |
| | POWER FACTOR (Typ.) | PF>0.9/115VAC, PF>0.9/230VAC, PF>0.9/277VAC at full load (Please refer to "Power Factor Characteristic" curve) | | | | |
| | EFFICIENCY (Typ.) | A series | 84.5% | 84.5% | 84% | 82.5% |
| | | B series | 85.5% | 86% | 85% | 83.5% |
| | AC CURRENT (Typ.) | 0.4A/115VAC | 0.2A/230VAC | 0.15A/277VAC | | |
| INRUSH CURRENT(Typ.) | COLD START 20A(twidth=25µs 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) Protection type : Shut down o/p voltage, re-power on to recover | | | | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +50°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 | UL 8750,CSA C22.2 No.250.0-08(except for PLD-16-350);ENEC EN 613471-1,EN 61347-2-13 independent, EN62384(for B type only)approved | | | | |
| | 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 (B type only), EN61000-3-2 Class C ; EN61000-3-3, FCC part 18 non-consumer equipment(A type only) | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level, criteria A | | | | |
| OTHERS | MTBF | 906.5Khrs min. MIL-HDBK-217F (25°C) | | | | |
| | DIMENSION | 84*57*29.5mm (L*W*H) | | | | |
| | PACKING | 0.19Kg; 72pcs/14.7Kg/0.92CUFT | | | | |
| 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. 2. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers. | | | | | |

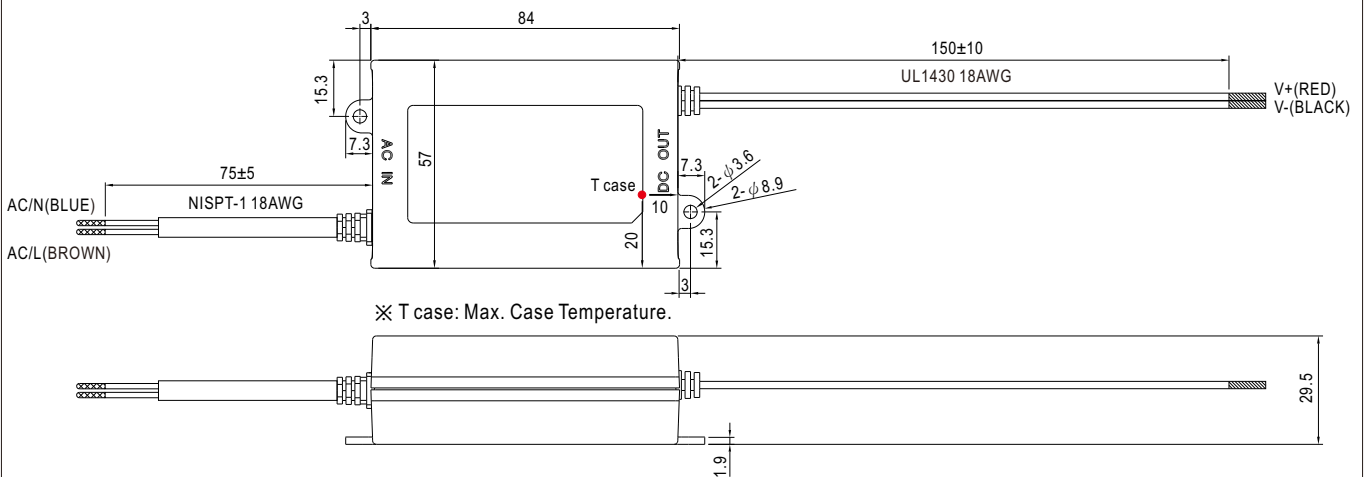
Mechanical Specification

Case No. PCD16A Unit: mm

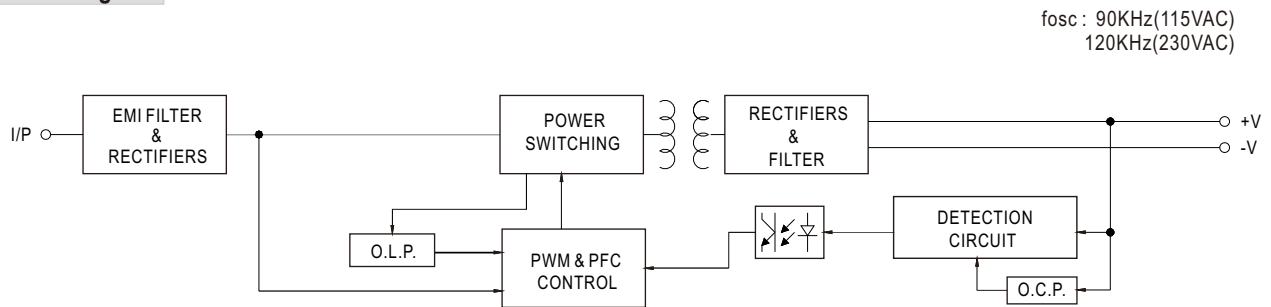
A Type: (PLD-16_A)



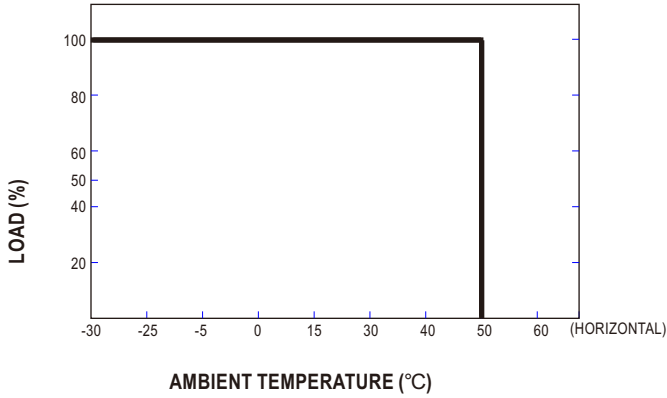
B Type: (PLD-16_B)



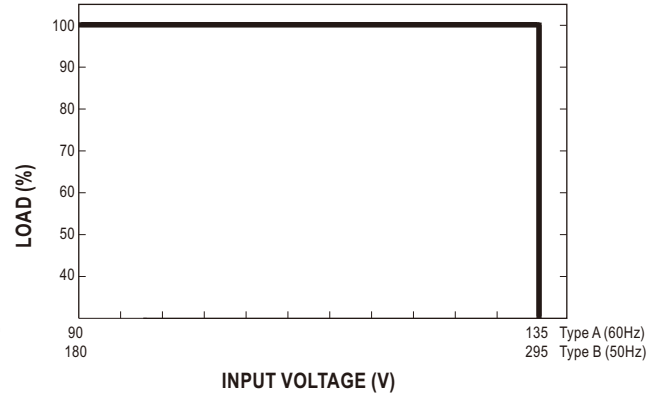
Block Diagram



■ Derating Curve

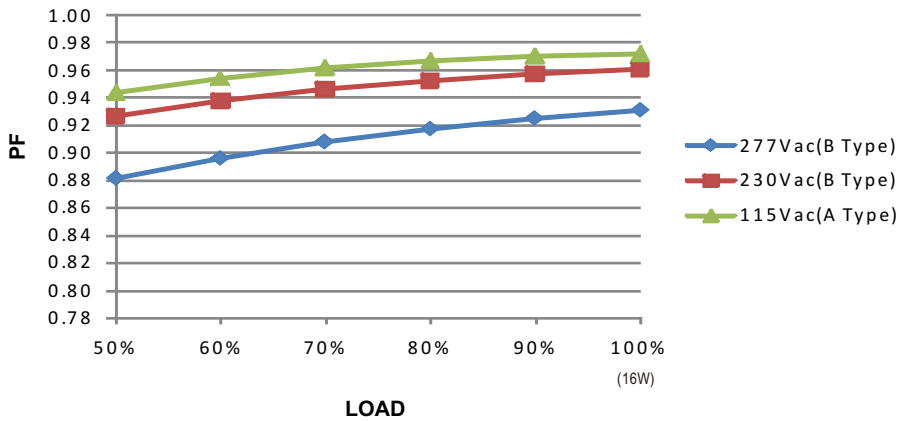


■ Static Characteristics



■ Power Factor Characteristic

Constant Current Mode



■ EFFICIENCY vs LOAD (PLD-16-350)

PLD-16 series possess superior working efficiency that up to 85.5% can be reached in field applications.

