☐ SELV IP42 (FC





## ■ 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
- ullet Class  ${\rm I\hspace{-.1em}I}$  power unit, no FG
- IP42 design
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)
- 100% full load burn-in test
- Low cost
- High reliability
- 3 years warranty









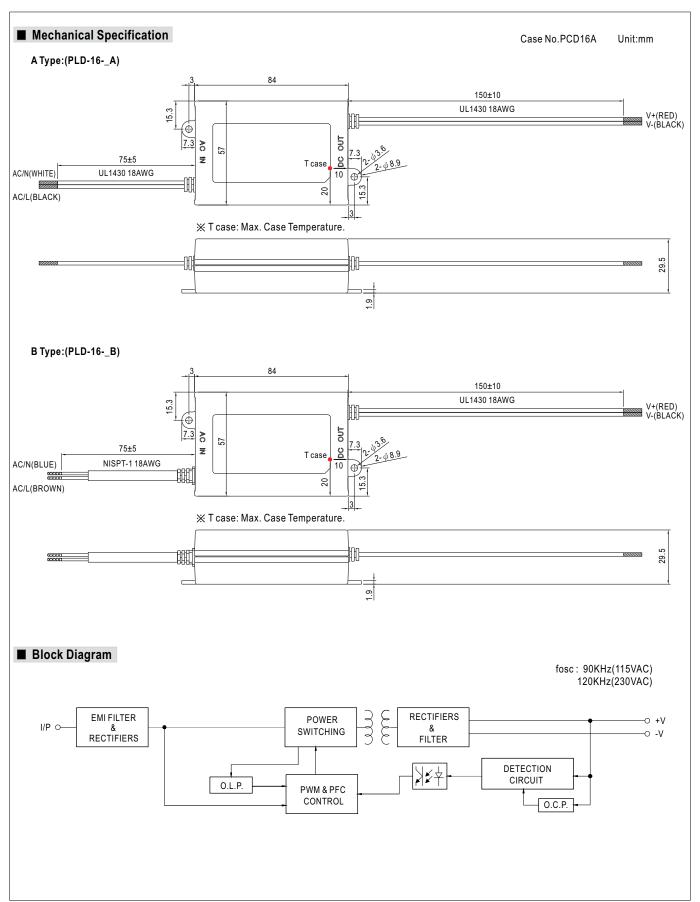
PLD-16-350 A : With AC input 90~ 135VAC.

B: With AC input 180~ 295VAC.

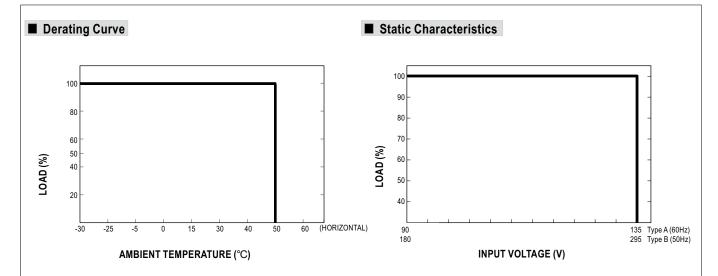
## **SPECIFICATION**

| MODEL       |  | PLD-16-350 | PLD-16-700 🗌   | PLD-16-1050 | PLD-16-1400 |         |
|-------------|--|------------|--|-------------|-------------|---------|
|             | RATED CURRENT  |            | 350mA  | 700mA       | 1050mA      | 1400mA  |
| OUTPUT      | 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.)  |            | 60V  | 35V         | 25V         | 16V     |
|             | SETUP TIME   |            | 500ms / 230VAC 2000ms / 115VAC at full load  |             |             |         |
|             | FREQUENCY RANGE  |            | 47 ~ 63Hz  |             |             |         |
| INPUT       | 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)   |             |             |         |
|             | TOTAL HARMONIC DISTORTION  | A series   |  |             |             |         |
|             |  | B series   | THD< 20% when output loading≧70% at 230VAC input and output loading≧80% at 277VAC input  |             |             |         |
|             | 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  |             |             |         |
|             | MAX. No. of PSUs<br>on 16A CIRCUIT<br>BREAKER  | A series   | 58 units (circuit breaker of type B) / 58 units (circuit breaker of type C) at 115VAC  |             |             |         |
|             |  | B series   | 128 units (circuit breaker of type B) / 128 units (circuit breaker of type C) at 230VAC  |             |             |         |
|             | LEAKAGE CURRENT  |            | <0.5mA/240VAC  |             |             |         |
| PROTECTION  | SHORT CIRCUIT  |            | Hiccup mode, recovers automatically after fault condition is removed.  |             |             |         |
|             | OVER TEMPERATURE   |            | 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 STANDARDS   |            | UL8750,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), EAC TP TC 004, IP42 approved |             |             |         |
| SAFETY &    | WITHSTAND VOLTAGE  |            | I/P-O/P:3.75KVAC   |             |             |         |
| EMC         | 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), EAC TP TC 020                  |             |             |         |
|             | EMC IMMUNITY   |            | Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level, criteria A, EAC TP TC 020   |             |             |         |
| 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        | <ol> <li>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>Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.</li> <li>To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains.</li> </ol> |            |  |             |             |         |

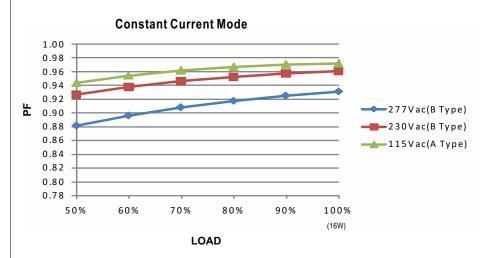








## ■ Power Factor Characteristic



## ■ EFFICIENCY vs LOAD (PLD-16-350)

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

