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

(for B type only) (for B type only) (for 350mA) (except for 350mA) SELV (for A type only) (for B type only)

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

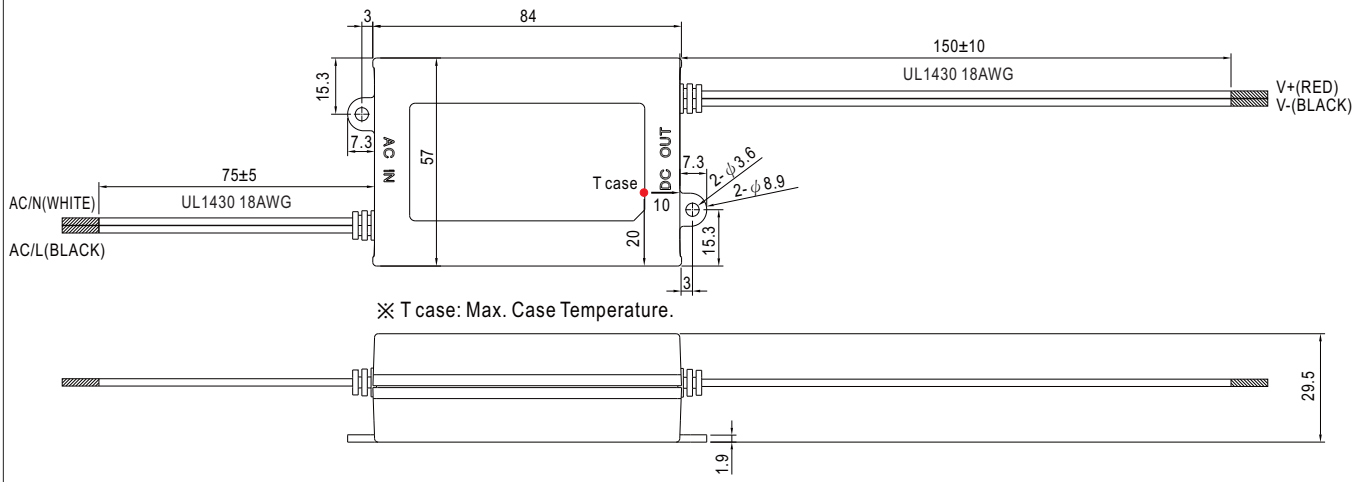
SPECIFICATION

MODEL			PLD-16-350 ☐	PLD-16-700 ☐	PLD-16-1050 ☐	PLD-16-1400 ☐
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.)		60V	35V	25V	16V
	SETUP TIME		500ms / 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		Shut down o/p voltage, re-power on to recover			
ENVIRONMENT	WORKING TEMP.		-30 ~ +50℃ (Refer to "Derating Curve")			
	WORKING HUMIDITY		20 ~ 95% RH non-condensing			
	STORAGE TEMP., HUMIDITY		-40 ~ +80℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT		±0.03%/℃ (0 ~ 50℃)			
	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℃/ 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℃)			
	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. 3. 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.					

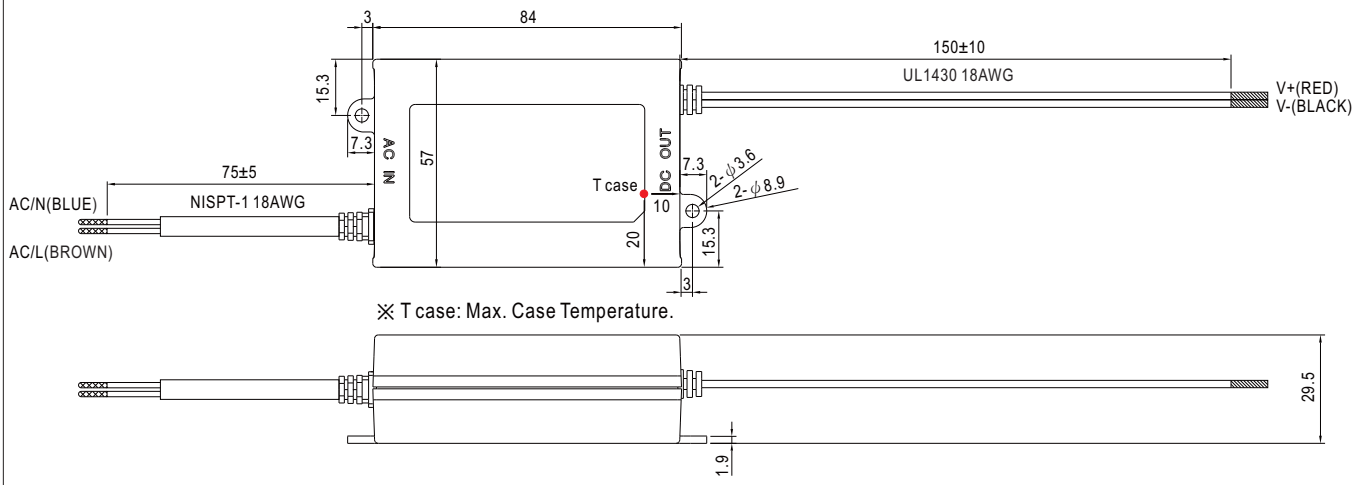
■ Mechanical Specification

Case No.PCD16A Unit:mm

A Type:(PLD-16-_A)

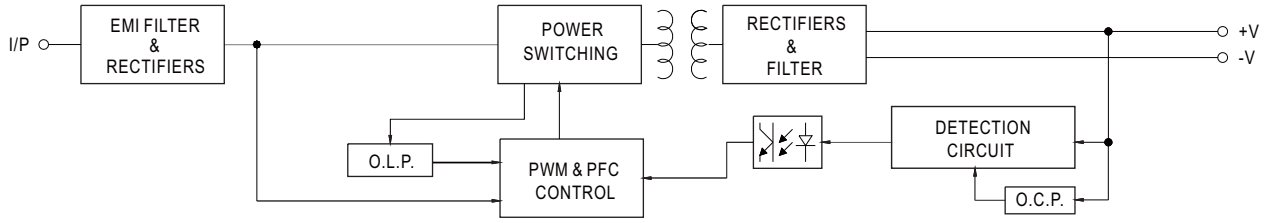


B Type:(PLD-16-_B)

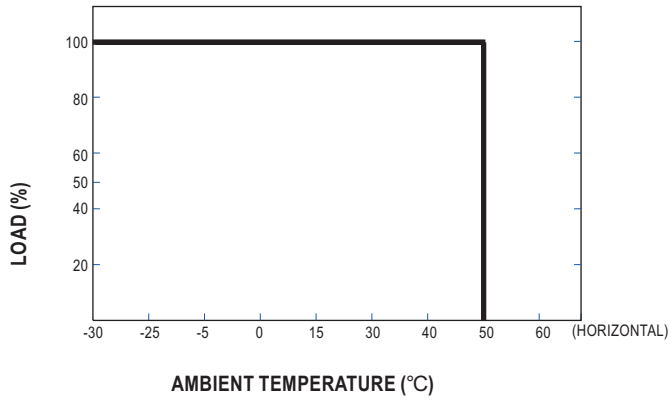


■ Block Diagram

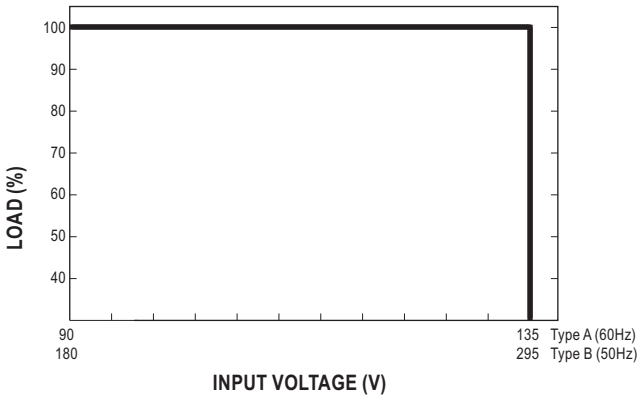
fosc : 90KHz(115VAC)
120KHz(230VAC)



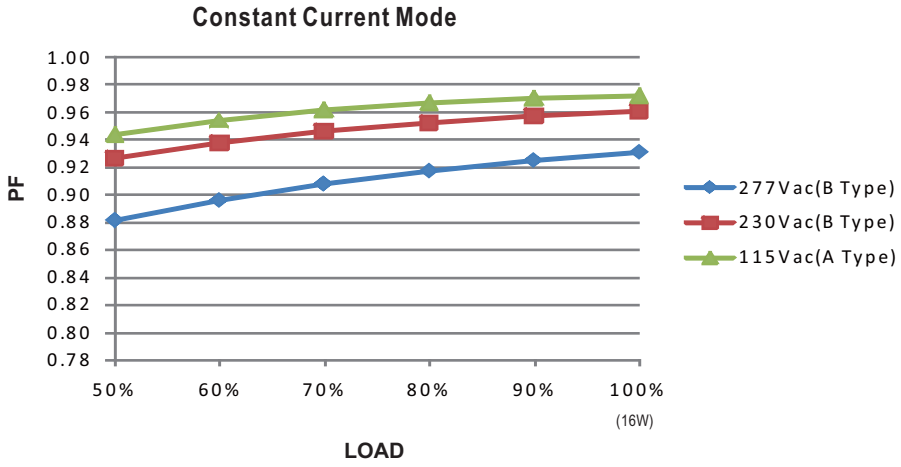
■ Derating Curve



■ Static Characteristics



■ 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.