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 2 Power Unit
- Class Ⅱ 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
- Suitable for dry / damp locations
- 3 years warranty

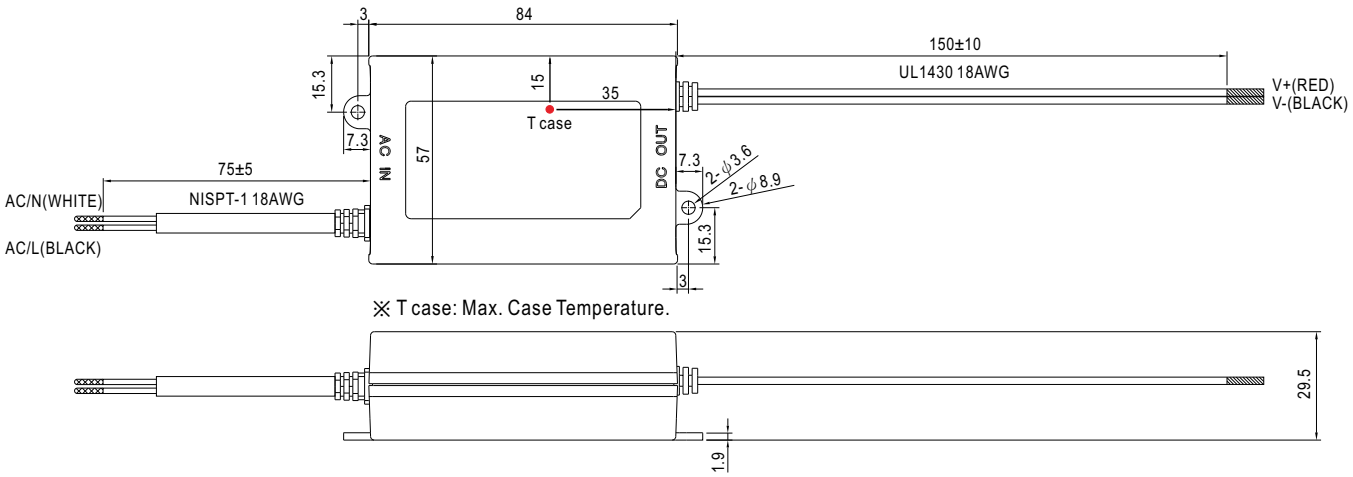
SPECIFICATION

(for 350mA&700mA) (except for 350mA&700mA) IP42 SELV

MODEL		PLD-25-350	PLD-25-700	PLD-25-1050	PLD-25-1400
OUTPUT	RATED CURRENT	350mA	700mA	1050mA	1400mA
	OPERATING VOLTAGE RANGE	40 ~ 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.)	60V	50V	35V	25V
	SETUP TIME	500ms / 230VAC 2000ms / 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)			
	TOTAL HARMONIC DISTORTION	THD< 20% when output loading≧70% at 115VAC/230VAC input and output loading≧80% at 277VAC input			
	EFFICIENCY (Typ.)	85%	86%	85%	84%
	AC CURRENT (Typ.)	0.6A/115VAC 0.3A/230VAC 0.2A/277VAC			
	INRUSH CURRENT(Typ.)	COLD START 25A(twidth=75μs measured at 50% Ipeak) at 230VAC			
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	72 units (circuit breaker of type B) / 80 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 ~ +60℃ (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	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, IP42 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℃/ 70% RH			
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C ($_{VII}$ 75% load) ; EN61000-3-3, FCC part 18 non-consumer equipment			
	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℃)			
	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. 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.				

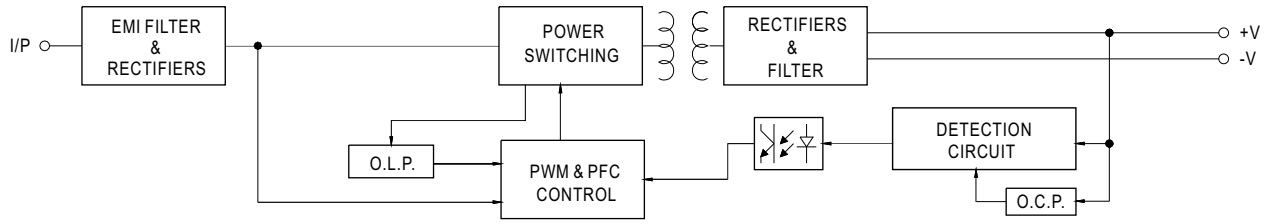
■ Mechanical Specification

Case No.PCD16A Unit:mm

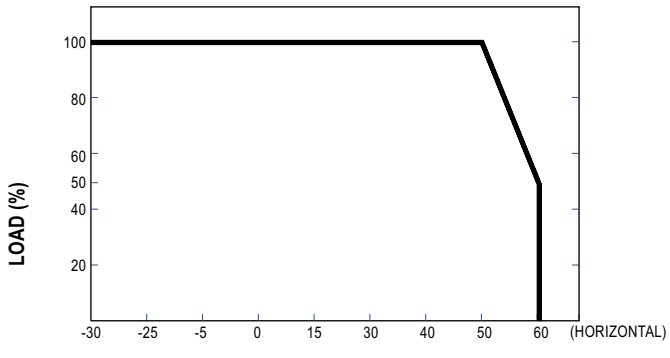


■ Block Diagram

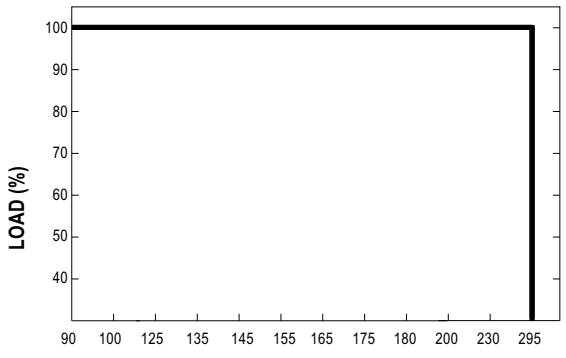
fosc : 90KHz(115VAC)
120KHz(230VAC)



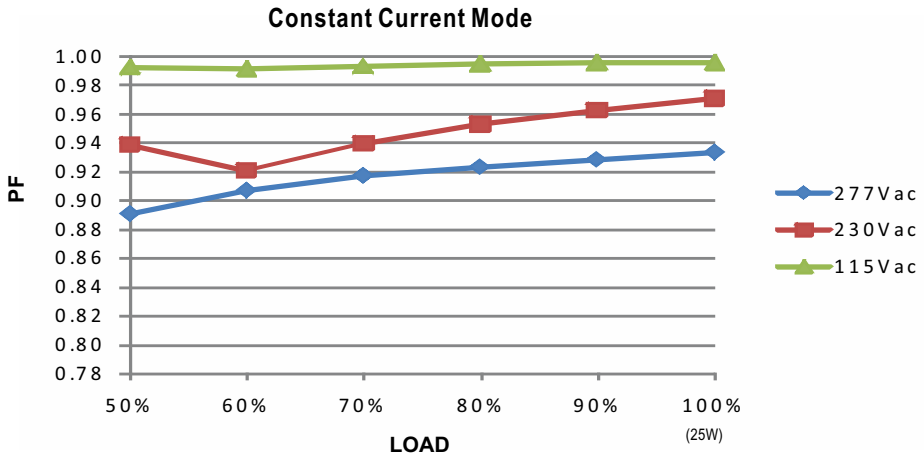
■ Derating Curve



■ Static Characteristics

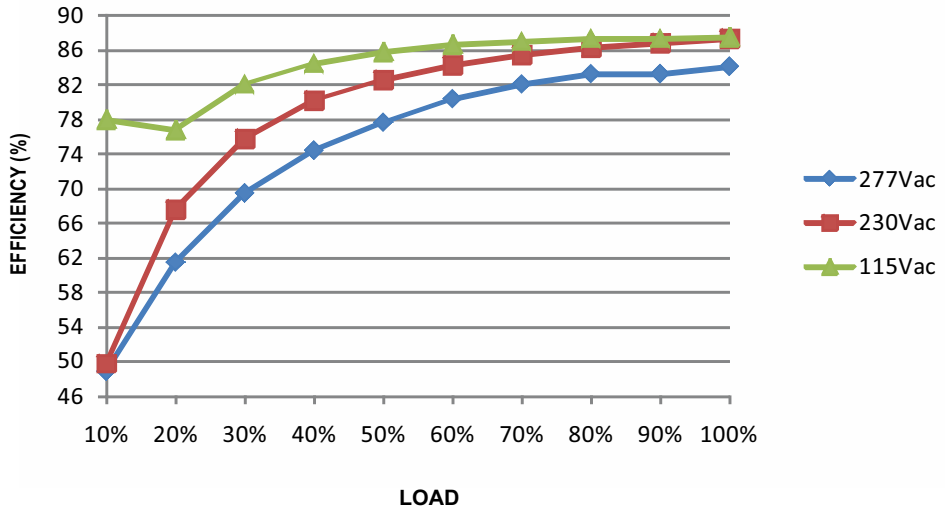


■ Power Factor Characteristic



■ EFFICIENCY vs LOAD (PLD-25-700)

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



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