60W Single Output AC Dimmable LED Power Supply PLD-60 series



Features :

- Built-in active PFC function
- Constant current design
- Protections: Short circuit / Over temperature
- Cooling by free air convection
- Fully isolated plastic case
- IP30 design
- Class Ⅱ power unit, no FG
- Suitable for indoor LED lighting applications
- 100% full load burn-in test
- Low cost
- High reliability
- 3 years warranty

SPECIFICATION

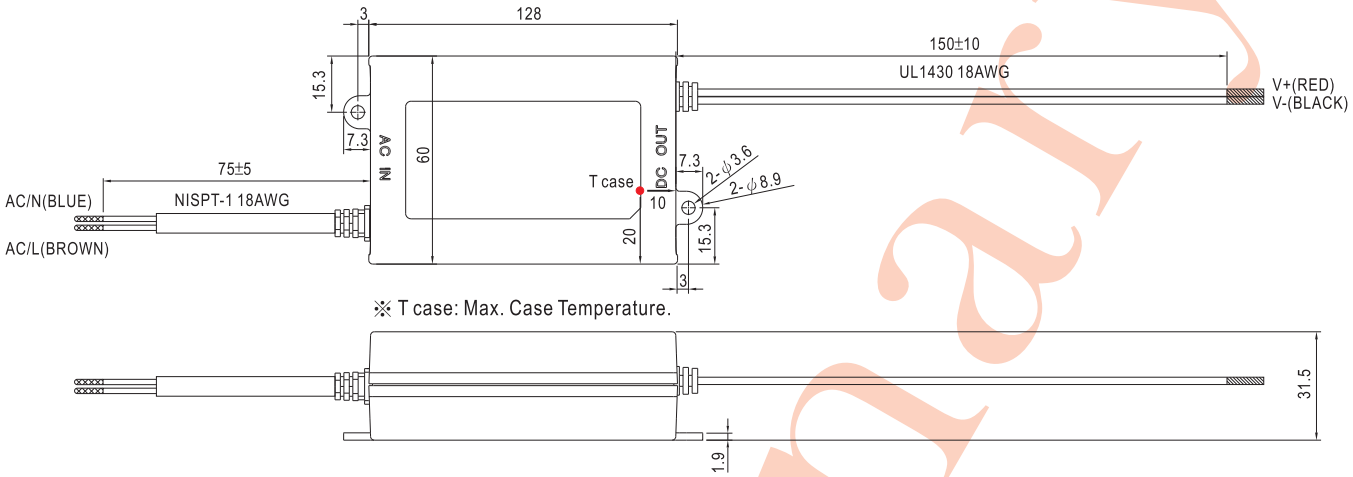
SELV (except for PLD-60-500) IP30 (for PLD-60-1400B~1750B) (except PLD-60-1400B~1750B)

MODEL		PLD-60-500B	PLD-60-700B	PLD-60-1050B	PLD-60-1400B	PLD-60-1750B	PLD-60-2000B	PLD-60-2400B
OUTPUT	RATED CURRENT	500mA	700mA	1050mA	1400mA	1750mA	2000mA	2400mA
	OPERATING VOLTAGE RANGE	65 ~ 115V	50 ~ 86V	34 ~ 57V	25 ~ 43V	20 ~ 34V	18 ~ 30V	15 ~ 25V
	CURRENT RANGE	0 ~ 500mA	0 ~ 700mA	0 ~ 1050mA	0 ~ 1400mA	0 ~ 1750mA	0 ~ 2000mA	0 ~ 2400mA
	CURRENT ACCURACY	±5.0%						
	RATED POWER	57.5W	60.2W	59.85W	60.2W	59.5W	60W	60W
	RIPPLE & NOISE (max.) Note.1	11Vp-p	7Vp-p	4.5Vp-p	3.5Vp-p	3.4Vp-p	2.4Vp-p	2.4Vp-p
	NO LOAD OUTPUT VOLTAGE (max.)	130V	100V	63V	50V	50V	35V	35V
	SETUP TIME	1700ms / 230VAC at full load						
INPUT	VOLTAGE RANGE	180~295VAC						
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR (Typ.)	PF>0.9/230VAC, PF>0.9/277VAC at full load (Please refer to "Power Factor Characteristic" curve)						
	EFFICIENCY (Typ.)	89%	88%	88%	87%	87%	87%	86%
	AC CURRENT (Typ.)	0.6A/230VAC						
	INRUSH CURRENT(max.)	30A/230VAC						
	LEAKAGE CURRENT	<0.5mA / 240VAC						
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.						
	OVER TEMPERATURE	105℃ ±10℃ (STW1)						
		Protection type : 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-60-500~1750) ; ENEC EN61347-1, EN61347-2-13 independent, IP30 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, EN61000-3-2 Class C ; EN61000-3-3						
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level(Surge 2KV), criteria A						
OTHERS	MTBF	Khrs min. MIL-HDBK-217F (25℃)						
	DIMENSION	128*60*31.5mm (L*W*H)						
	PACKING	Kg						
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.							

Preliminary

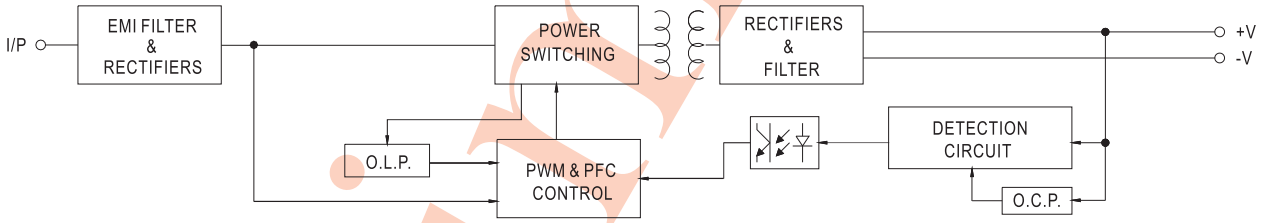
■ Mechanical Specification

Case No. Unit:mm

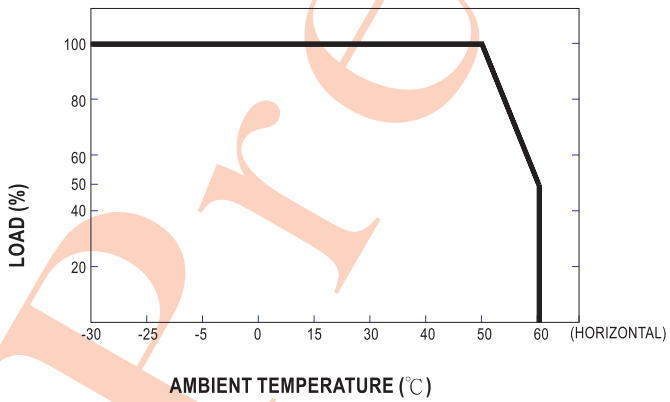


■ Block Diagram

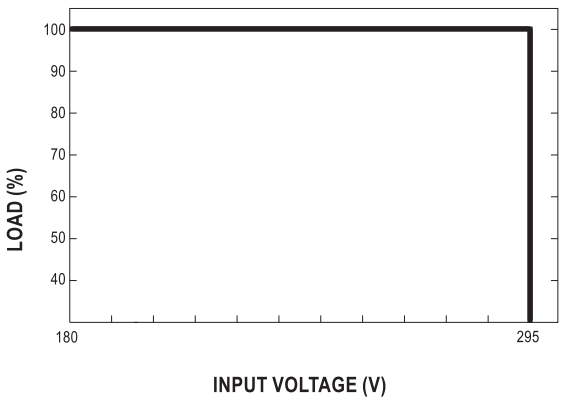
fosc :120KHz(230VAC)



■ Derating Curve

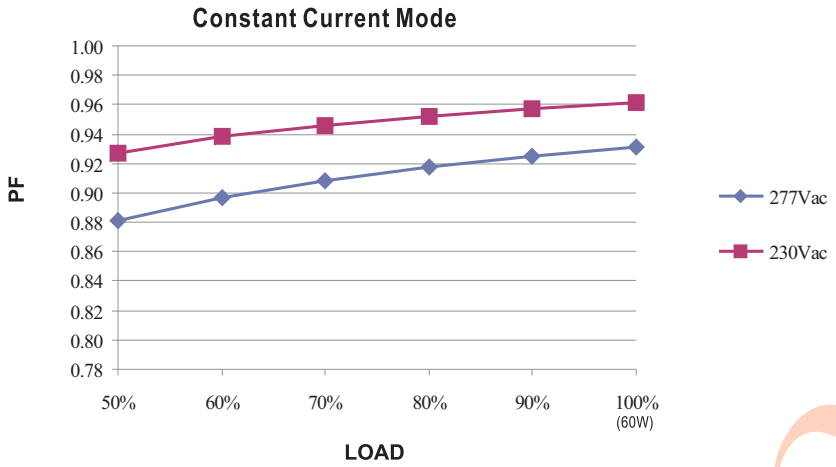


■ Static Characteristics



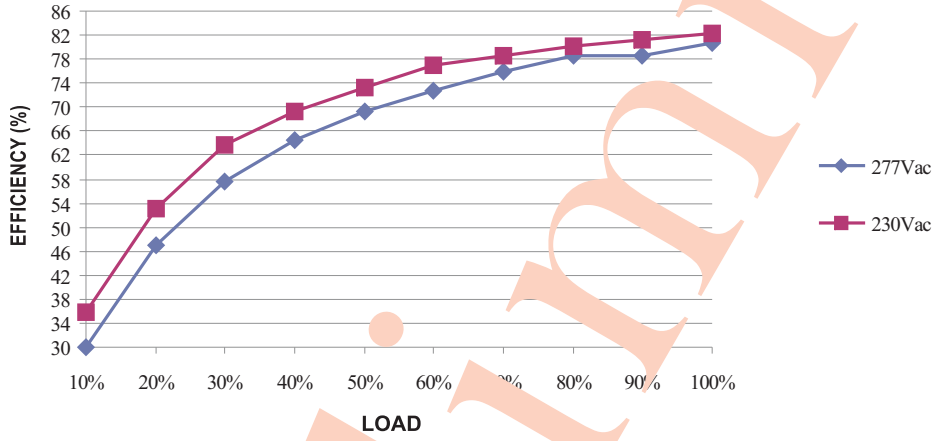
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Power Factor Characteristic



EFFICIENCY vs LOAD (PLD-60-500)

PLD-60 series possess superior working efficiency that up to 87% can be reached in field applications.



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