



40W Single Output LED Power Supply

PLD-40 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

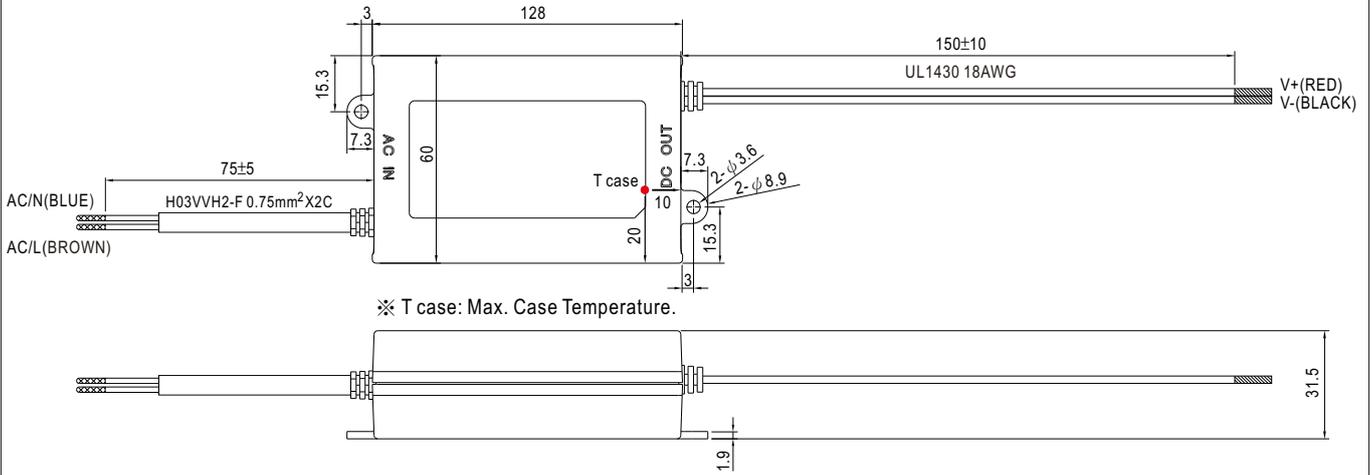


SPECIFICATION

MODEL	PLD-40-350B	PLD-40-500B	PLD-40-700B	PLD-40-1050B	PLD-40-1400B	PLD-40-1750B	
OUTPUT	RATED CURRENT	350mA	500mA	700mA	1050mA	1400mA	1750mA
	OPERATING VOLTAGE RANGE	70 ~ 108V	45 ~ 80V	34 ~ 57V	22 ~ 38V	17 ~ 29V	13 ~ 23V
	CURRENT ACCURACY	±5.0%					
	RATED POWER	37.8W	40W	39.9W	39.9W	40.6W	40.25W
	RIPPLE & NOISE (max.) Note.1	9.5Vp-p	5.0Vp-p	3.1Vp-p	2.6Vp-p	2.5Vp-p	2.4Vp-p
	NO LOAD OUTPUT VOLTAGE (max.)	118V	100V	63V	50V	35V	35V
	SETUP TIME	500ms / 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)					
	TOTAL HARMONIC DISTORTION	THD< 20% when output loading≥60%(PLD-40-350B loading≥65%)at 230VAC input and output loading≥75% at 277VAC input					
	EFFICIENCY (Typ.)	88%	88%	87%	87%	86%	86%
	AC CURRENT (Typ.)	0.35A/230VAC		0.3A/277VAC			
	INRUSH CURRENT(Typ.)	COLD START 25A (twidth=60μs 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, auto-recovery					
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	ENEC EN61347-1, EN61347-2-13 independent, EN62384 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, 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 B					
OTHERS	MTBF	865.176Khrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	128*60*31.5mm (L*W*H)					
	PACKING	0.22Kg/30pcs/7.6Kg/0.58CUFT					
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.						

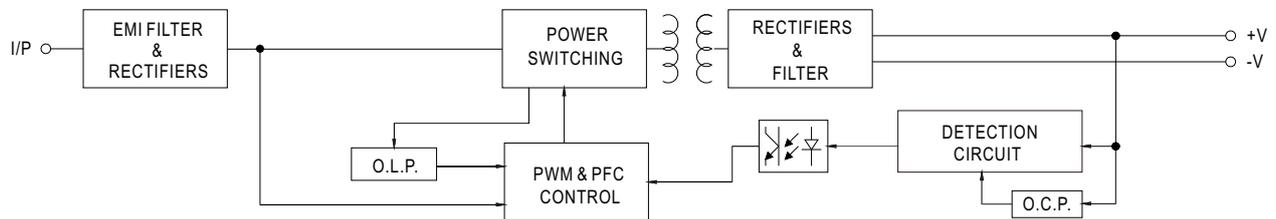
■ Mechanical Specification

Case No.:PCD40A Unit:mm

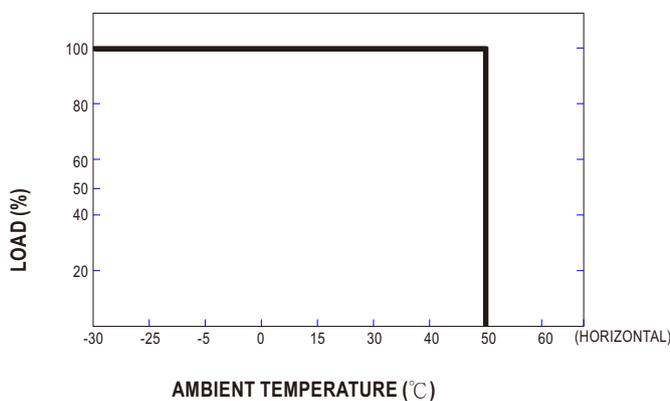


■ Block Diagram

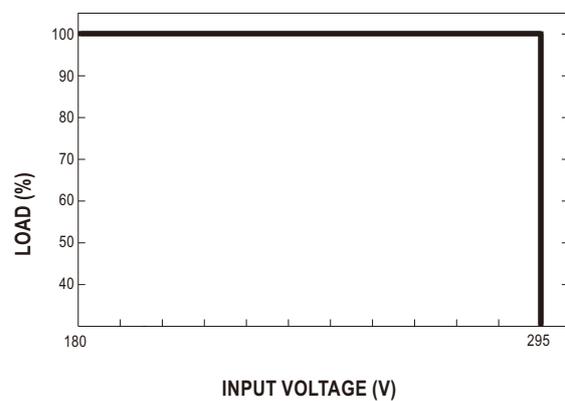
fosc :60KHz(230VAC)



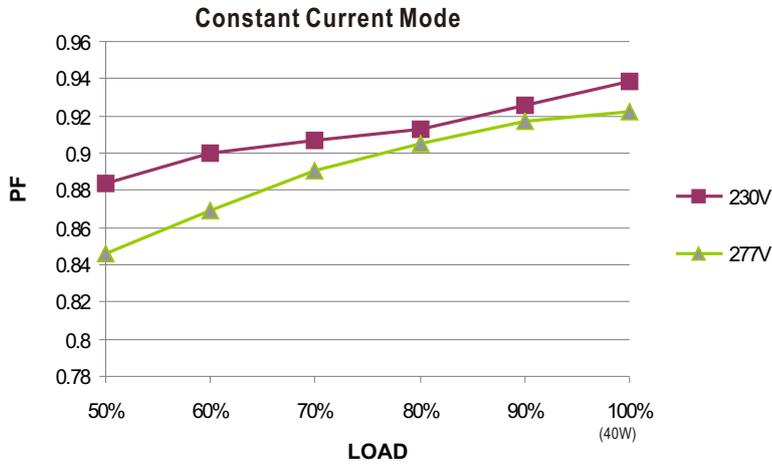
■ Derating Curve



■ Static Characteristics



Power Factor Characteristic



EFFICIENCY vs LOAD (PLD-40-500B)

PLD-40 series possess superior working efficiency that up to 88% can be reached in field applications.

