



# 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
- IP42 design
- Class II power unit, no FG
- 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

IS 15885(Part 2/Sec13)

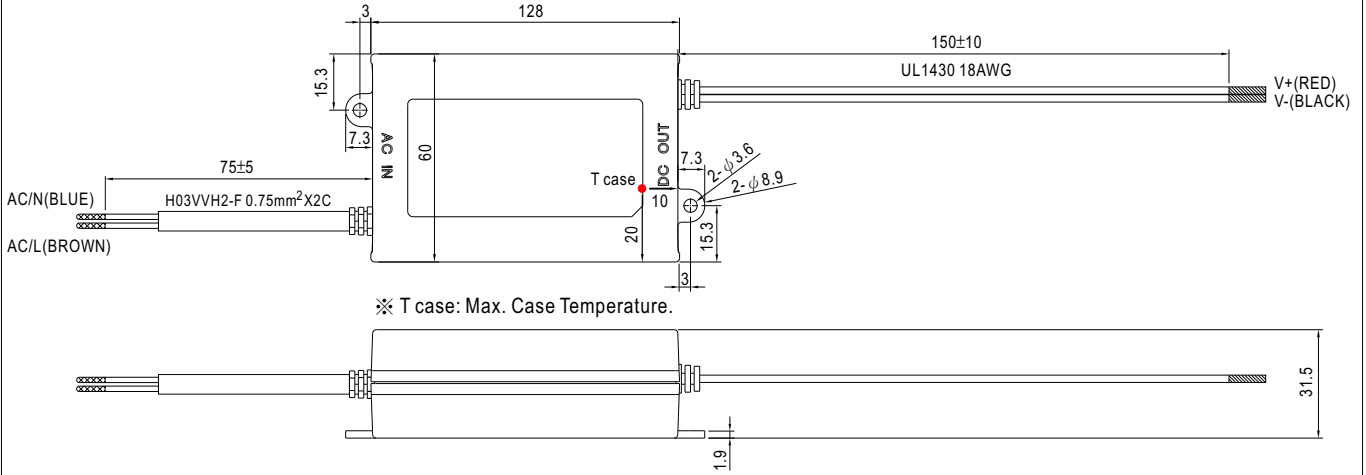


### SPECIFICATION

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						
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	47 units (circuit breaker of type B) / 47 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, 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, BIS IS15885(for 350B,700B,1050B only), EAC TP TC 004, IP42 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, EAC TP TC 020						
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level(Surge 2KV), criteria B, EAC TP TC 020						
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. 4. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). 5. For any application note and IP water proof function installation caution, please refer our user manual before using. <a href="https://www.meanwell.com/Upload/PDF/LED_EN.pdf">https://www.meanwell.com/Upload/PDF/LED_EN.pdf</a> ※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a>							

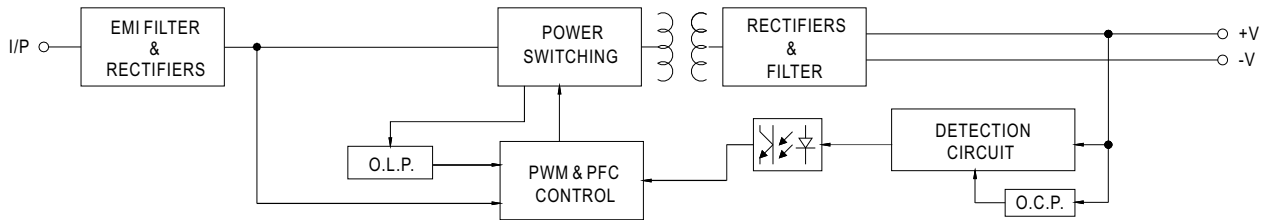
■ Mechanical Specification

Case No.:PCD40A Unit:mm

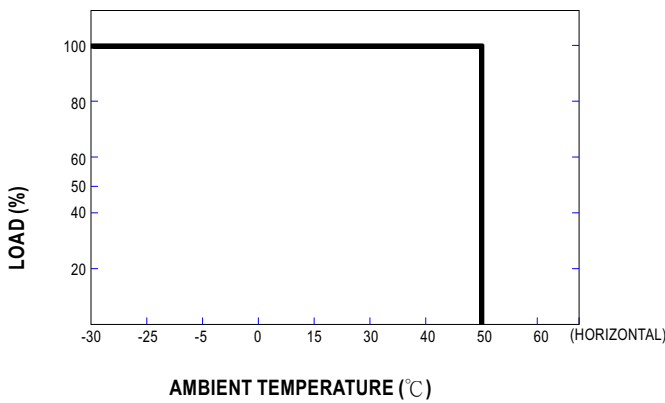


■ Block Diagram

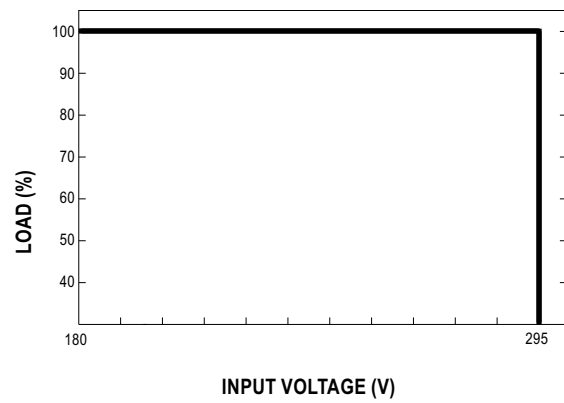
fosc :60KHz(230VAC)



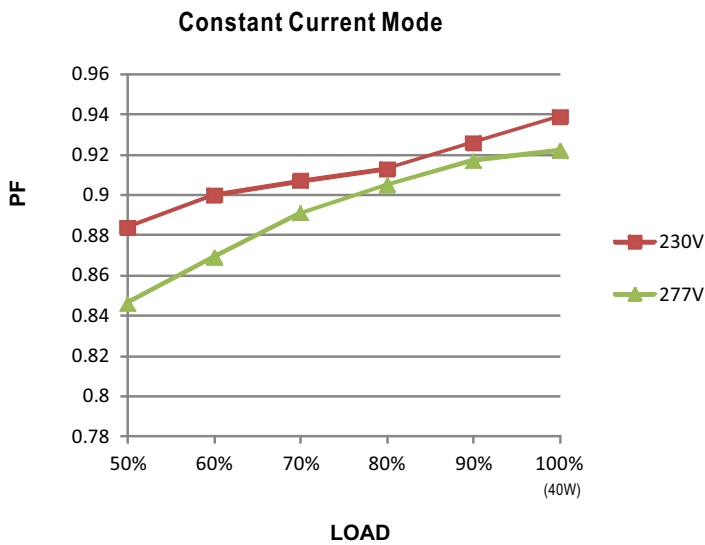
■ Derating Curve



■ 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.

