

MEAN WELL PLD-40 Series 40W Single Output LED Power **Supply Owner's Manual**

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MEAN WELL PLD-40 Series 40W Single Output LED Power Supply Owner



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 I 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

SPECIFICATION

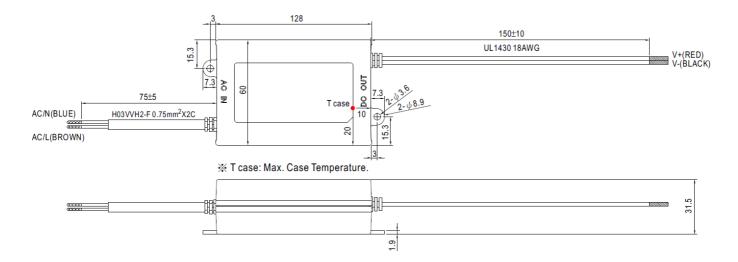
MODEL		PLD-40-350B	PLD-40-500B	PLD-40-700B	PLD-40-1050B	PLD-40-1400B	PLD-40-1750B
OUTPUT	RATED CURRENT	350mA	500mA	700mA	1050mA	1400mA	1750mA
	OPERATING VOLTAGE RANGE	70 ~ 108V	45 ~ 80V	34 ~ 57V	22 ~ 38V	17 ~ 29V	13 ~ 23V
	CURRENT ACCURACY	±5.0%					
	RATED POWER	37.8W	40W	39.9W	39.9W	40.6W	40.25W
	RIPPLE & 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					
	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 BS EN/EN61347-1, BS EN/EN61347-2-13 independent, BS EN/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 BS EN/EN55015, BS EN/EN61000-3-2 Class C; BS EN/EN61000-3-3, EAC TP TC 020					
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61547, light industry level(Surge 2KV), criteria B, EAC TP TC 020					
OTHERS	MTBF	4826.5K hrs min. Telcordia SR-332 (Bellcore); 865.2Khrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	128*60*31.5mm (L*W*H)					
	PACKING	0.22Kg;30pcs/7.6Kg	0.22Kg;30pcs/7.6Kg/0.58CUFT				

NOTE

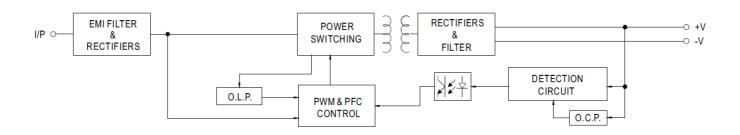
- 1. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 2. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.
- 3. To fulfil requirements of the latest ErP regulation for lighting 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 5C/1000m with fan models for operating altitude higher than 2000m(6500ft).
- 5. For any application note and P water proof function installation caution, please refer our user manual before using. https://www.meanwell.com/Upload/PDF/LED_EN.pdf
 - x Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



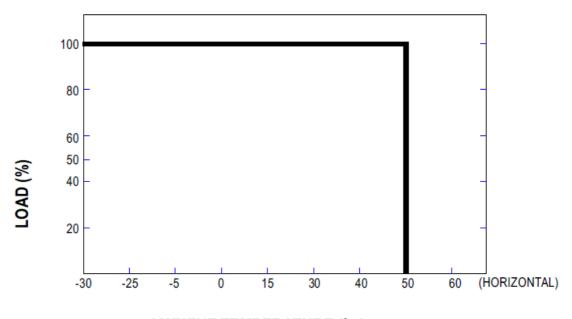
Mechanical Specification



Block Diagram

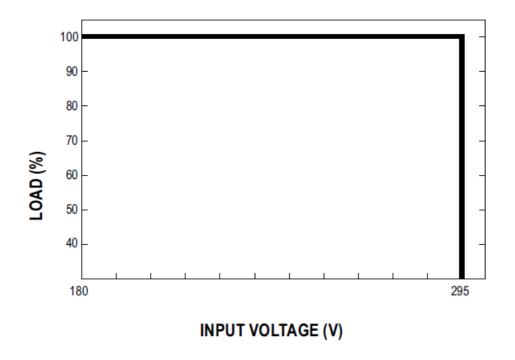


Derating Curve



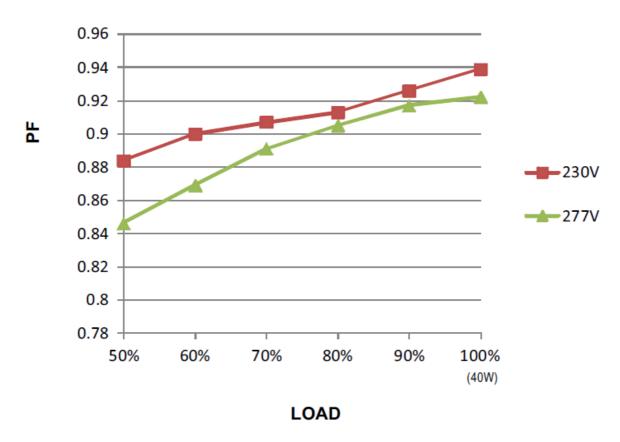
AMBIENT TEMPERATURE ($^{\circ}$ C)

Static Characteristics



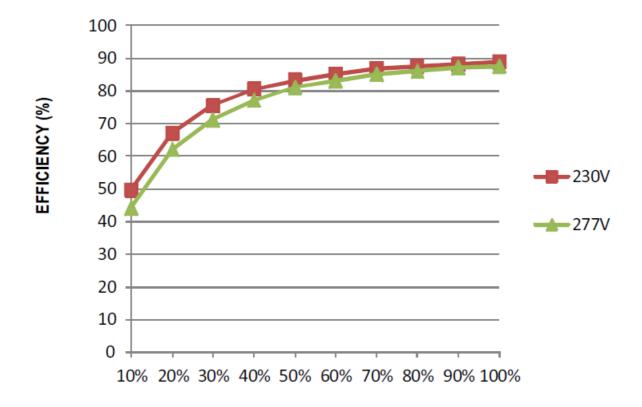
Power Factor Characteristic

Constant Current Mode



FFICIENCY vs LOAD (PLD-40-500B)

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



LOAD

Documents / Resources



MEAN WELL PLD-40 Series 40W Single Output LED Power Supply [pdf] Owner's Manual PLD-40 Series, 40W Single Output LED Power Supply, PLD-40 Series 40W Single Output LED Power Supply, Output LED Power Supply, LED Power Supply, Power Supply, Power Supply

Manuals+,