



60W Single Output 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
- 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

User's Manual



■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

IS 15885(Part 2/Sec13)



SPECIFICATION

| 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 | 70 ~ 108V | 50 ~ 86V | 34 ~ 57V | 25 ~ 43V | 20 ~ 34V | 18 ~ 30V | 15 ~ 25V |
| | CURRENT ACCURACY | ±5.0% | | | | | | |
| | RATED POWER | 54W | 60.2W | 59.85W | 60.2W | 59.5W | 60W | 60W |
| | RIPPLE & NOISE (max.) Note.1 | 10.2Vp-p | 5.6Vp-p | 3.8Vp-p | 3.4Vp-p | 3.3Vp-p | 2.4Vp-p | 2.4Vp-p |
| | NO LOAD OUTPUT VOLTAGE (max.) | 118V | 100V | 63V | 50V | 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-60-500B loading≥65%)at 230VAC input and output loading≥75% at 277VAC input | | | | | | |
| | EFFICIENCY (Typ.) | 88% | 87% | 87% | 86% | 86% | 86% | 86% |
| | AC CURRENT (Typ.) | 0.6A/230VAC 0.5A/277VAC | | | | | | |
| | INRUSH CURRENT(Typ.) | COLD START 25A (twidth=60μs measured at 50% Ipeak) at 230VAC | | | | | | |
| | MAX. No. of PSUs on 16A CIRCUIT BREAKER | 32 units (circuit breaker of type B) / 32 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 ~ +45℃ (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 | ENEC BS EN/EN61347-1, BS EN/EN61347-2-13 independent, BS EN/EN62384, BIS IS15885(for 700B,1050B,1400B 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℃ / 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 | 4642.1K hrs min. Telcordia SR-332 (Bellcore) ; 458.9Khrs min. MIL-HDBK-217F (25℃) | | | | | | |
| | DIMENSION | 128*60*31.5mm (L*W*H) | | | | | | |
| | PACKING | 0.34Kg;30pcs/11.2Kg/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℃/1000m with fanless models and of 5℃/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. https://www.meanwell.com/Upload/PDF/LED_EN.pdf ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx | | | | | | | |

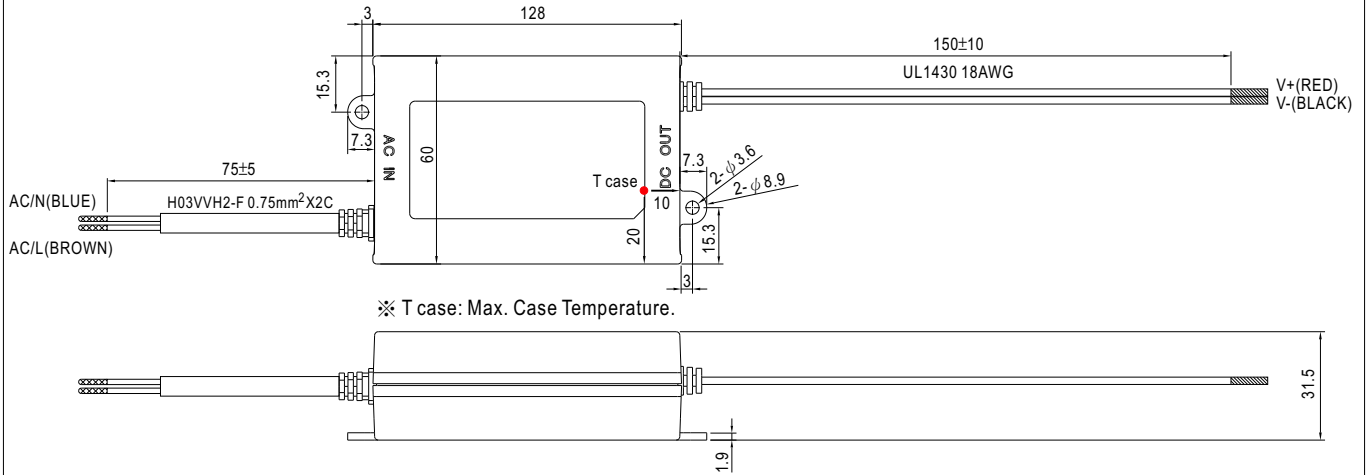


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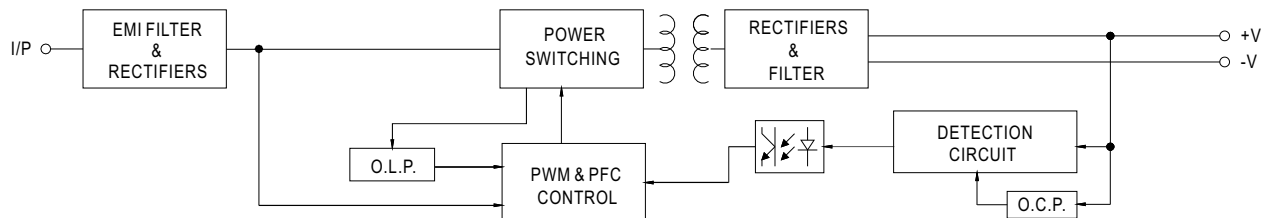
Mechanical Specification

Case No. Unit:mm

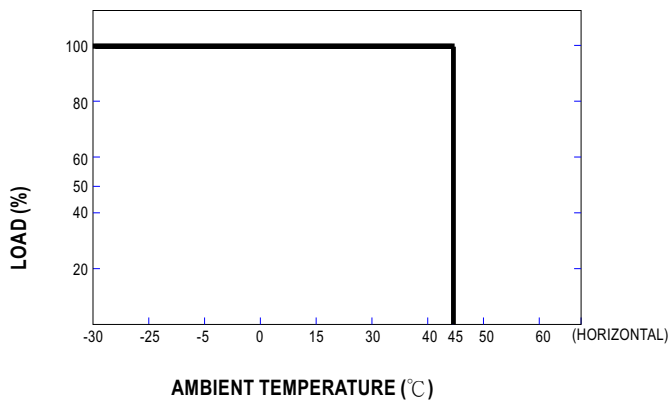


Block Diagram

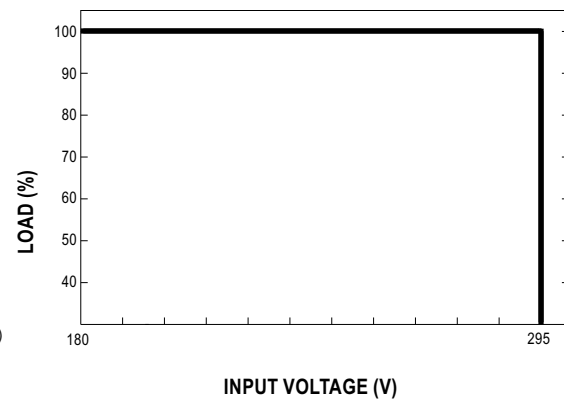
fosc :60KHz(230VAC)



Derating Curve



Static Characteristics



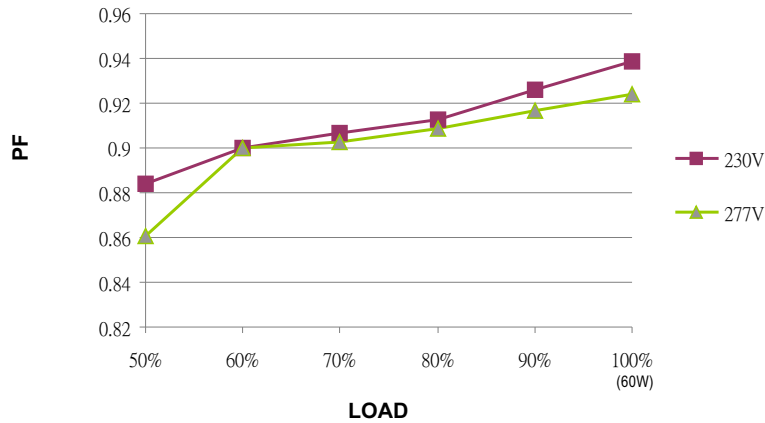


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Power Factor Characteristic

Constant Current Mode



EFFICIENCY vs LOAD (PLD-60-500B)

PLD-60 series possess superior working efficiency that up to 88% can be reached in field applications.

