



LDP60 SERIES

60WATT OUTPUT

LED POWER SUPPLY



Features

- * 60W Single / Dual outputs
- * Universal AC input range 90-305Vac
- * Constant Current Design
- * Active PFC > 0.9
- * Low inrush current < 5A
- * No load power consumption <0.5W
- * Low profile with 25.2mm height and narrow 40mm width
- * Low frequency flicker design
- * Continuous short circuit protection
- * Over temperature protection
- * IP 67 Rated
- * Fully isolated plastic case
- * Dimming function: DALI / PWM / 1~10VDC / Potentiometer



| MODEL | Output Rated Voltage | Constant Current Region | Ripple and Noise(Vp-p max) _{100kHz} | Output Rated Current | No Load Output Voltage (max.) | Output Rated Power | %EFF (Mp) |
|------------------|----------------------|-------------------------|--|------------------------|-------------------------------|--------------------|-----------|
| LDP60A240-C250BR | 24V | 9-24Vdc | 0.24V | 2500mA | 29Vdc | 60.0W | 85% |
| LDP60A240-C250B | 24V | 16-24Vdc | 2.2V | | | | 88% |
| LDP60A240-C210BR | 24V | 9-24Vdc | 0.24V | 2100mA | 29Vdc | 50.4W | 84% |
| LDP60A240-C210B | 24V | 16-24Vdc | 2.2V | | | | 87% |
| LDP60A240-C175BR | 24V | 9-24Vdc | 0.24V | 1750mA | 29Vdc | 42.0W | 84% |
| LDP60A240-C175B | 24V | 16-24Vdc | 2.2V | | | | 86% |
| LDP60A360-C166BR | 36V | 9-36Vdc | 0.36V | 1666mA | 43Vdc | 60.0W | 85% |
| LDP60A360-C166B | 36V | 24-36Vdc | 2.7V | | | | 89% |
| LDP60A360-C140BR | 36V | 9-36Vdc | 0.36V | 1400mA | 43Vdc | 50.5W | 84% |
| LDP60A360-C140B | 36V | 24-36Vdc | 2.7V | | | | 88% |
| LDP60A480-C125BR | 48V | 9-48Vdc | 0.48V | 1250mA | 56Vdc | 60.0W | 86% |
| LDP60A480-C125B | 48V | 32-48Vdc | 4.8V | | | | 90% |
| LDP60A480-C105BR | 48V | 9-48Vdc | 0.48V | 1050mA | 56Vdc | 50.4W | 85% |
| LDP60A480-C105B | 48V | 32-48Vdc | 4.8V | | | | 89% |
| LDP60B240-C125BR | 24V | 9-24Vdc | 0.24V | V1 1250mA V2 1250mA | 29Vdc 29Vdc | 30.0W 30.0W | 85% |
| LDP60B240-C105BR | 24V | 9-24Vdc | 0.24V | V1 1050mA V2 1050mA | 29Vdc 29Vdc | 25.2W 25.2W | 84% |
| LDP60B360-C083BR | 36V | 9-36Vdc | 0.36V | V1 833mA V2 833mA | 43Vdc 43Vdc | 30W 30W | 85% |
| LDP60B360-C070BR | 36V | 9-36Vdc | 0.36V | V1 700mA V2 700mA | 43Vdc 43Vdc | 25.2W 25.2W | 84% |
| LDP60B480-C062BR | 48V | 9-48Vdc | 0.48V | V1 625mA V2 625mA | 56Vdc 56Vdc | 30W 30W | 87% |

Note : Ripple and Noise are measured at 20MHz bandwidth with a 0.1uF ceramic capacitor and 10uF aluminum capacitor.

All specifications are Typical at nominal line, full load and 25°C unless otherwise noted

Order Information:

| Series | Output(W) | O/P: Single/Dual | Output Voltage | Dimming Function | Rated Output Current | Input Voltage | Ripple Noise |
|--------|-----------|--------------------------|----------------|--|---|-----------------|--|
| LDP | 60 | X | XXX | X | XXX | B | X |
| | | A : Single O/P with IP67 | 240 : 24V | C : No dimming D : DALI dimming P : PWM 1-10V, Potentiometer | 24V | B : 100-277 Vac | R : 1% output ripple and noise or Blank : 10% output ripple and noise |
| | | | 360 : 36V | | 250: 2500mA 210: 2100mA 175: 1750mA | | |
| | | | 480 : 48V | | 166: 1666mA 140: 1400mA | | |
| | | B : Dual O/P with IP67 | 240 : 24V | | 125: 1250mA 105: 1050mA | | |
| | | | 360 : 36V | | 125: 1250mA 105: 1050mA | | |
| | | | 480 : 48V | | 082: 833mA 070: 700mA 062: 625mA | | |

Specifications

INPUT SPECIFICATIONS:

AC Input Voltage 90~305Vac
 Frequency 50/60Hz
 Power Factor.....PF \geq 0.9 @ 115Vac/230Vac , 75%~100%Load
 Inrush Current <5A after 100us @240Vac, Cold Start @25°C
 Leakage Current 0.75mA max
 Standby power.....<0.5w @ DALI off ,D+,D- off (0V,shorted)
 No load Consumption.....<0.5W (No Dimming)
 Input Current (Full Load).....0.69A/0.32A typ @115Vac/230Vac

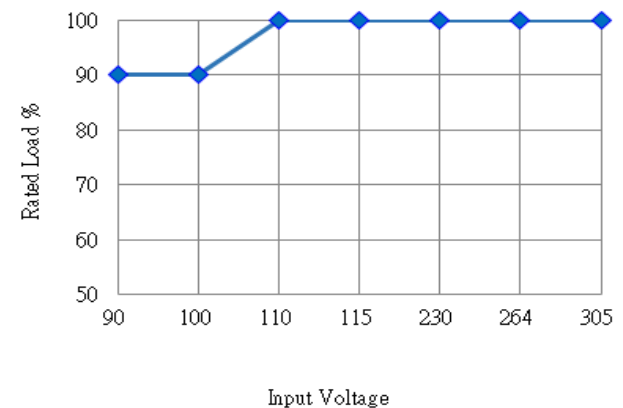
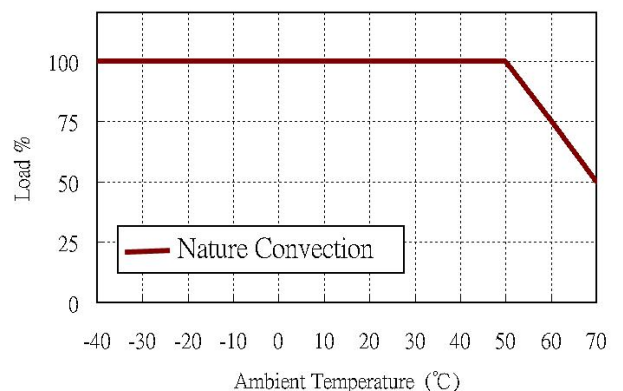
OUTPUT SPECIFICATIONS:

Maximum Output Voltage..... See Table.
 Constant Current Accuracy...(note 1)..... \pm 5%max.
 Current Line Regulation(note 2)..... \pm 5%max.
 Current Load Regulation(note 3)..... \pm 5%max.
 Start up time..... 0.5 second max.
 Over Voltage Protection.....TVS Clamp.
 Short Circuit Protection..... Hiccup Mode, Auto Recovery
 Over Temperature Protection.....105°C typ.

GENERAL SPECIFICATIONS:

Efficiency..... See Table.
 Temperature coefficient..... \pm 0.05%/°C (0~50°C).
 Isolation voltage, Input to output.....3.75KVac.
 Isolation resistance, Input to output.....10⁸ Ω min.
 Operating Ambient Temperature-40 ~ 70°C (see derating curve).
 Cooling.....natural convection.
 Storage Temperature..... -40 ~ 85°C .
 Operating Humidity.....20%~95%RH non-condensing.
 Operating Altitude.....Sea Level to 3000m
 MTBF,MIL-HDBK-217F (25°C Ta)200K Hrs.
 Dimensions.....10.315x1.575x0.992inch (262.00x40.00x25.20mm).
 Weight.....530g.

LDP60 Series Derating Curve



SAFETY AND EMISSIONS:

Safety.....UL8750,IEC61347-1
 IEC61347-2-13
 EMI.....FCC part 15/EN55015 Class B
 EMS.....EN61547,EN61000-4-2,3,4,5,6,8,11
 EN61000-3-2 Harmonic Class C,EN61000-3-3

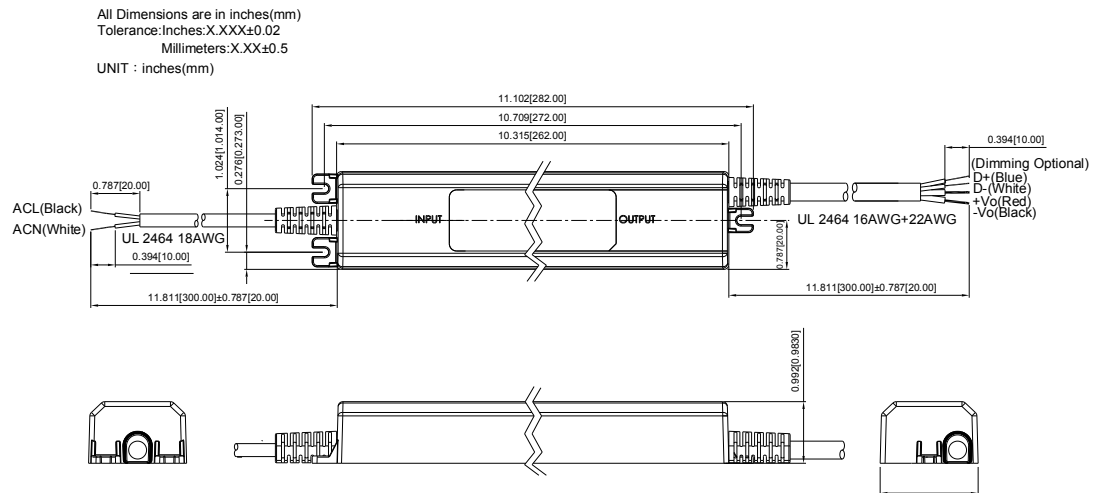
NOTE:

1. Current accuracy is set at nominal input voltage and full load.
2. Line regulation is measured from High Line to Low Line with full load.
3. Load regulation is measured minimum to maximum of the constant current region
4. Nominal Input Voltage at 230Vac
5. The input/output wires accessibility shall be evaluated during final system assembly.

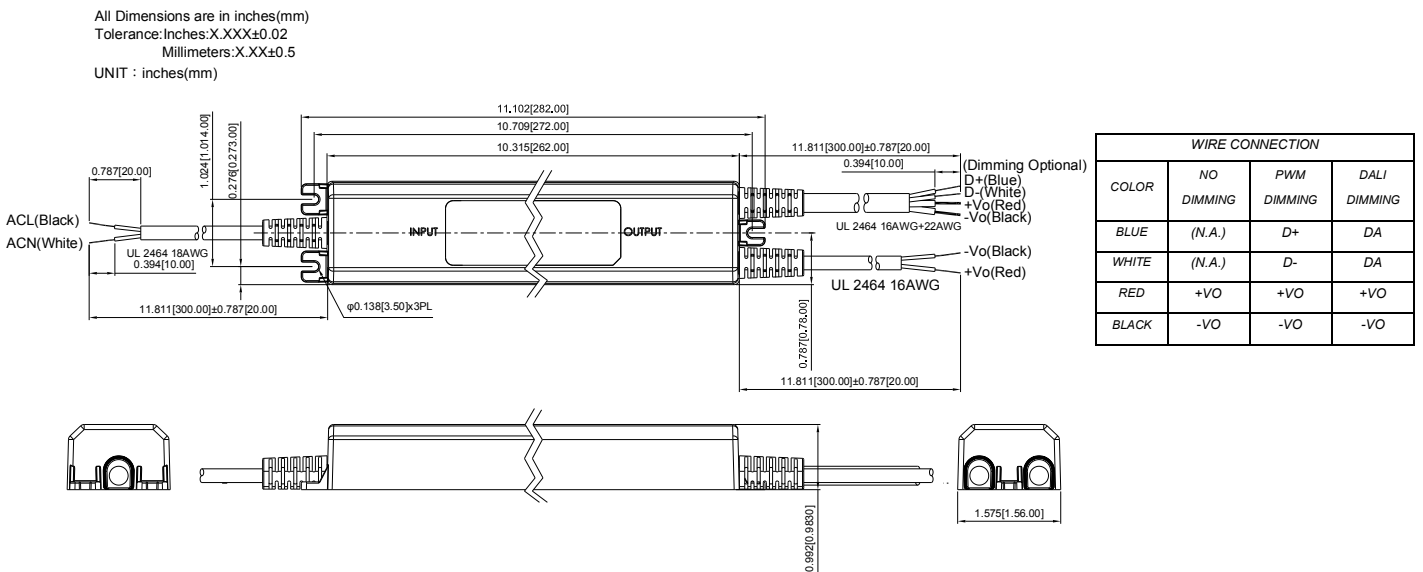
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Mechanical Specification

Single output



Dual Output



All specifications are Typical at nominal line , full load and 25°C unless otherwise noted