



# 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
- \* 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(Vpp max) <sub>N<sub>net</sub></sub>	Output Rated Current	No Load Output Voltage (max.)	Output Rated Power	%EFF (tp)
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.....115Vac/230Vac.....PF≥0.9 at 75%~100%Load.  
 Inrush Current ..... <5A after 100us @240Vac, Cold Start @25°C.  
 Leakage Current ..... 0.75mA max.  
 No load Consumption.....2W typ.(Note 1)

**OUTPUT SPECIFICATIONS:**

Maximum Output Voltage..... See Table.  
 Constant Current Accuracy...(note 2).....±5%max.  
 Current Line Regulation .....(note 3)..... ±5%max.  
 Current Load Regulation .....(note 4)..... ±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.....±0.05%/°C (0~50°C).  
 Isolation voltage, Input to output.....3.75kVac.  
 Isolation resistance, Input to output.....10<sup>8</sup>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, IEC/EN61347-1  
 IEC/EN61347-2-13  
 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.No load power consumption 1W will be introduced in Sep. 2014.
2. Current accuracy is set at nominal input voltage and full load.
3. Line regulation is measured from High Line to Low Line with full load.
4. Load regulation is measured minimum to maximum of the constant current region
5. Nominal Input Voltage at 230Vac
6. The input/output wires accessibility shall be evaluated during final system assembly.

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

**Mechanical Specification**

**Single output**



**Dual Output**



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