



# LDP40 SERIES

## 40 WATT OUTPUT

### LED POWER SUPPLY



## Features

- \* 40W Single 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(V p-p max.) <sup>Note1</sup>	Output Rated Current	No Load Output Voltage (max.)	Output Rated Power	%EFF. (typ.)
LDP40S240-C170BR	24V	9-24Vdc	0.24V	1700mA	29Vdc	40.80W	86%
LDP40S240-C170B	24V	16-24Vdc	2.0V				89%
LDP40S240-C140BR	24V	9-24Vdc	0.24V	1400mA	29Vdc	33.60W	85%
LDP40S240-C140B	24V	16-24Vdc	2.0V				88%
LDP40S360-C111BR	36V	9-36Vdc	0.36V	1110mA	43Vdc	40.00W	86%
LDP40S360-C111B	36V	24-36Vdc	2.7V				89%
LDP40S360-C105BR	36V	9-36Vdc	0.36V	1050mA	43Vdc	37.80W	85%
LDP40S360-C105B	36V	24-36Vdc	2.7V				88%
LDP40S480-C084BR	48V	9-48Vdc	0.48V	840mA	56Vdc	40.32W	88%
LDP40S480-C084B	48V	32-48Vdc	4.8V				90%
LDP40S480-C070BR	48V	9-48Vdc	0.48V	700mA	56Vdc	33.60W	86%
LDP40S480-C070B	48V	32-48Vdc	4.8V				88%

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)	IP Code	Output Voltage	Dimming Function	Rated Output Current	Input Voltage	Ripple Noise
LDP	40	X	XXX	X	XXX	B	X
		S : Single O/P with IP64	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		36V		
			480 : 48V		48V		
		A : Single O/P with IP67	240 : 24V		24V		
			360 : 36V		36V		
			480 : 48V		48V		

**Specifications**

**INPUT SPECIFICATIONS:**

AC Input Voltage ..... 90~305Vac  
 Frequency ..... 50/60Hz  
 Power Factor.....115Vac/230Vac.....PF $\geq$ 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)..... $\pm$ 5%max.  
 Current Line Regulation .....(note 3)..... $\pm$ 5%max.  
 Current Load Regulation .....(note 4)..... $\pm$ 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.....10<sup>8</sup> $\Omega$  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.....6.614x1.575x0.992 inch (168.00x40.00x25.20mm)  
 Weight.....350g

**LDP40 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,  
 EN61000-3-2 Harmonic Class C,EN61000-3-3

**NOTE:**

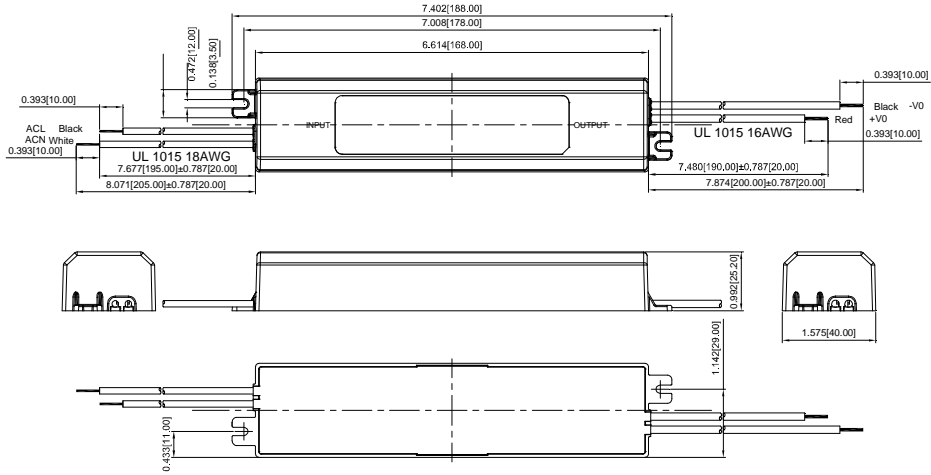
- 1.No load power consumption 1W will be introduced in Sep. 2014.
2. Current accuracy is set at nominal input voltage and full load.
3. Line regulation is measured from High Line to Low Line with full load.
4. Load regulation is measured minimum to maximum of the constant current region
5. Nominal Input 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**

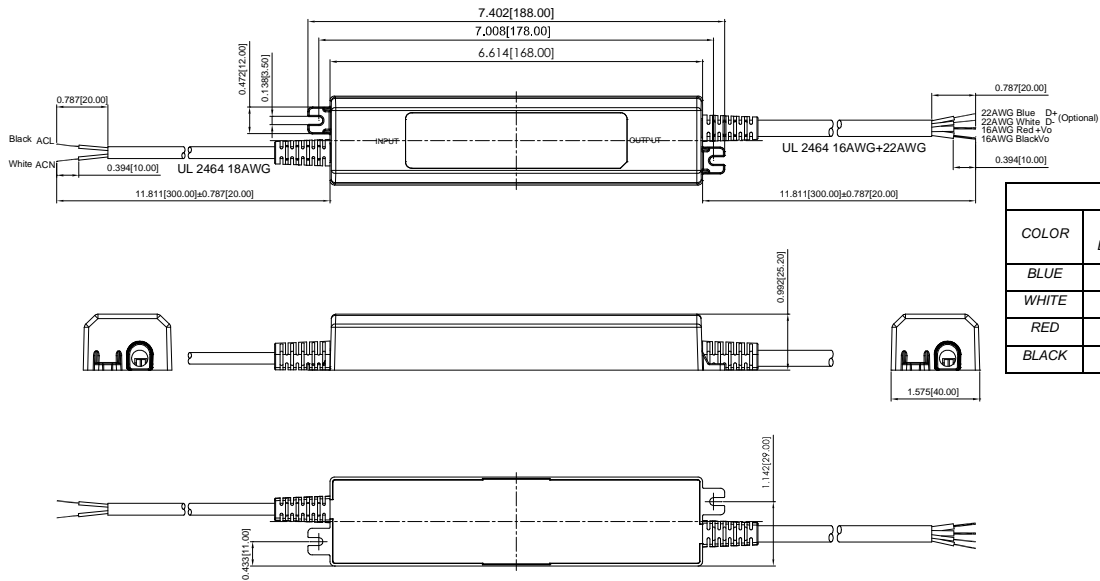
**Standard Cable for LDP40Sxxx-CxxxBx**

All Dimensions are in inches(mm)  
 Tolerance: Inches: X.XXX±0.02  
 Millimeters: X.XX±0.5



**Standard Cable for LDP40Sxxx-DxxxBR, LDP40Sxxx-PxxxBR, LDP40Axxx-xxxxBR**

All Dimensions are in inches(mm)  
 Tolerance: Inches: X.XXX±0.02  
 Millimeters: X.XX±0.5



WIRE CONNECTION			
COLOR	NO DIMMING	PWM DIMMING	DALI DIMMING
BLUE	(N.A.)	D+	DA
WHITE	(N.A.)	D-	DA
RED	+VO	+VO	+VO
BLACK	-VO	-VO	-VO

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