



# LDP40 SERIES

## 40 WATT OUTPUT

### LED POWER SUPPLY



## Features

- \* High Universal AC Input Range 90-305Vac
- \* High Active PFC, > 0.9
- \* Low Inrush Current <5A
- \* Low Profile for Easy Installation, 25.4mm Height, 40mm Narrow Width
- \* Low Flicker for Lighting
- \* Constant Output Current Design
- \* Continuous Short Circuit Protection
- \* Over Voltage Protection
- \* Over Temperature Protection
- \* Suitable for LED Lighting and Moving Sign Applications
- \* Fully Isolated Plastic Case
- \* Optional IP67
- \* Optional Dimming Function, need the signal from dimming controller with DALI/PWM/1-10Vdc/potentiometer ( please confirm the controller type when ordering )



MODEL	Output Rated Voltage	Constant Current Region	Ripple and Noise(V p-p max.) <sub>Note1</sub>	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%
LDP40S360-C111BR	36V	9-36Vdc	0.36V	1110mA	43Vdc	40.00W	86%
LDP40S360-C111B	36V	24-36Vdc	2.7V				89%
LDP40S480-C084BR	48V	9-48Vdc	0.48V	840mA	56Vdc	40.32W	88%
LDP40S480-C084B	48V	32-48Vdc	4.8V				90%

Note1: Ripple and Noise are measured at 20MHz bandwidth with a 0.1uF ceramic capacitor and 10uF aluminum capacitor.

### Order Information:

<u>LDP</u>	<u>40</u>	<u>X</u>	<u>X</u>	-	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>B</u>	<u>X</u>
↓	↓	S : Single O/P A : Single O/P with IP67	240 : 24V 360 : 36V 480 : 48V		C : No dimming D : with DALI dimming P : with PWM dimming 1-10V/ Potentiometer	170 : 1700mA 111 : 1110mA 084 : 840mA			100-277 Vac	R : 1% output ripple and noise or Blank : 10% output ripple and noise
LDP Series	Output Power	ID Code	Output Voltage		ID Code	Output Current (set when ordering)			Ac Input Voltage	ID Code

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

## 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

### OUTPUT SPECIFICATIONS:

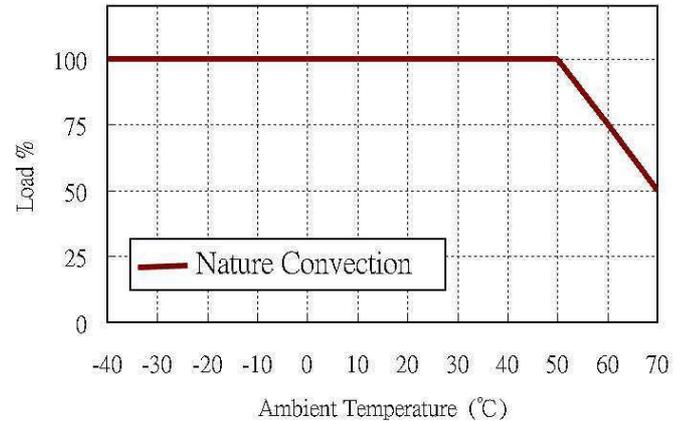
Maximum Output Voltage..... See Table  
 Constant Current Accuracy...(note1)..... $\pm$ 5%max.  
 Current Line Regulation .....(note 2)..... $\pm$ 5%max.  
 Current Load Regulation .....(note 3)..... $\pm$ 5%max.  
 Start up time.....1 second max  
 Over Voltage Protection.....TVS Clamp  
 Short Circuit 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

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## 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

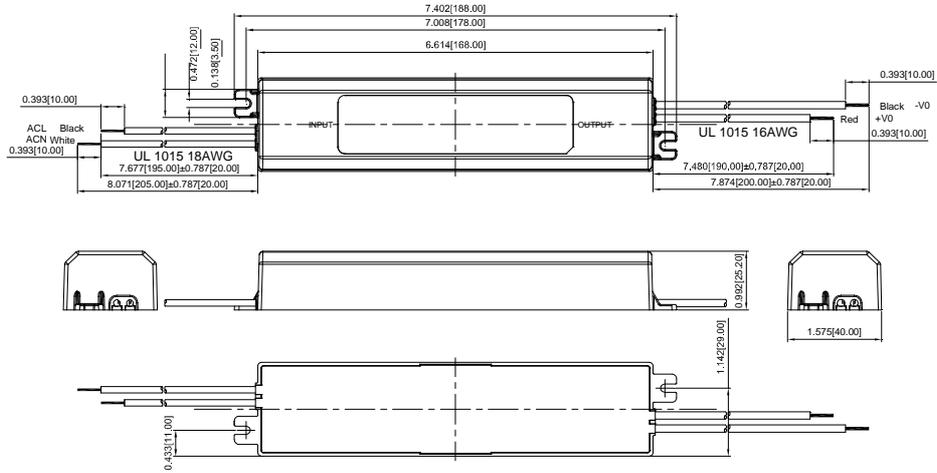
### NOTE:

1. 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

# Mechanical Specification

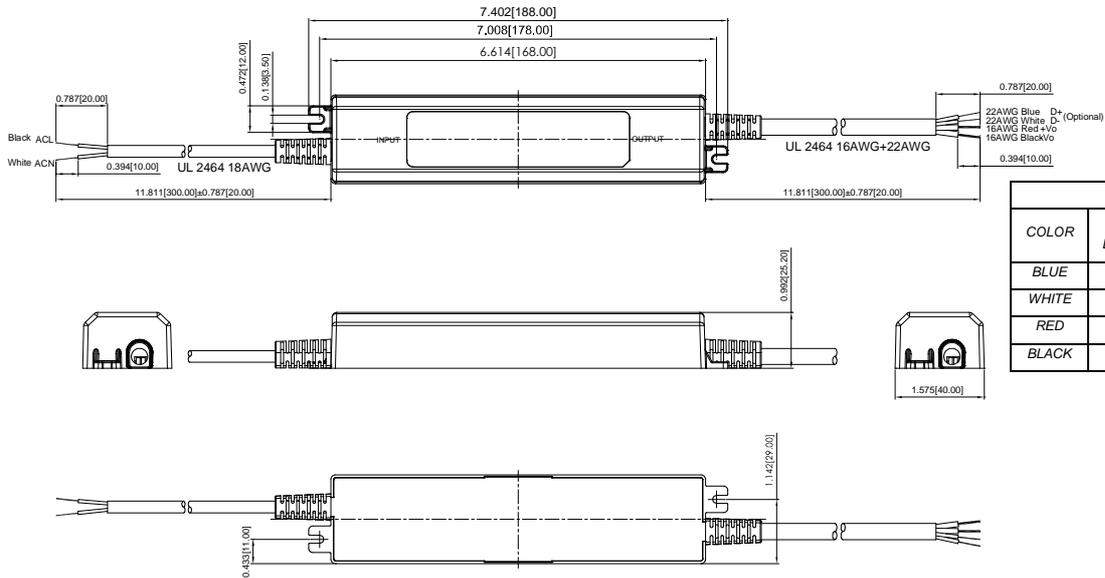
## Standard Cable for LDP40Sxxx-CxxxBx

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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