PHIHONG'S 150W CONSTANT CURRENT DRIVERS WITH 94% EFFICIENCY

PROVIDE TRULY ADVANCED PERFORMANCE



Output Voltage	Output Current	Output Power
0V~425V	0.35A	150W
0V~280V	0.53A	150W
0V~210V	0.7A	150W
0V~140V	1.05A	150W
0V~100V	1.5A	150W
0V~89V	1.68A	150W

PDA150B Series	
Brand Name	**Phihong LED Driver**
Description	**150W, Non-Dimmable LED Driver**
Input Voltage	**120 ~ 277VAC**
Input Frequency	**50/60Hz**
Safety	**CE, UL, RoHS**
IP Rating	**IP66**

Electrical Specifications:

Output Power (W)	Output Voltage (V)	Output Current (A)	Tcase Max (C)	Input Current (A)	Input Power (W)	Inrush Current	Max THD (%)	Min Power Factor	Surge Protection (KV)	Part Number
150	0V~425V	0.35	80	1.4A@120VAC 0.6A@277VAC	164	≤ 30A	12	0.9	4.0	PDA150B-S350G-R
150	0V~280V	0.53								PDA150B-S530G-R
150	0V~210V	0.7								PDA150B-S700G-R
150	0V~140V	1.05								PDA150B-S1A0G-R
150	0V~100V	1.5								PDA150B-S1A5G-R
150	0V~89V	1.68								PDA150B-S1A7G-R

Wiring Diagram



Input, Output use lead-wires. Lead-wires are 18AWG 105C/600V solid Copper.

Standard Lead Length

Color	In.	Cm.
Black	10	25
White	10	25
Blue	10	25
Red	10	25

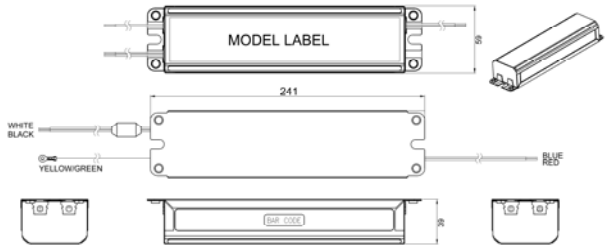


Length:	241mm (9.49in)
Width:	59mm (2.32in)
Height:	39mm (1.54in)
Weight	1043g (2.3lbs)

Maximum Wiring Distance (at Full Load)

Wire Size (AWG)	Distance (Feet)
26	8
24	13
22	21
20	34
18	54
16	85
14	137
12	210
10	357

Dimension Diagram



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Installation & Application Notes:

Section I – Physical Characteristics

1.1 LED Driver shall be installed inside an electrical enclosure.

1.2 Wiring inside electrical enclosure shall comply with 600V/105°C rating or higher.

Section II – Performance

2.1 LED Driver complies with UL standard UL8750

2.2 LED Driver has Class A sound rating.

2.3 LED Driver has a minimum ambient operating temperature of -40°C.

2.4 LED Driver has a life expectancy of 50,000 hours at Tcase of ≤80°C.

2.5 LED Driver has a life expectancy of 100,000 hours at Tcase of ≤65°C.

2.6 LED Driver has a typical self rise of 25°C at maximum load in open air without heat sink.

2.7 LED Driver maximum allowable case temperature is 80°C – see product label for measurement location.

2.8 LED Driver reduces output power to LEDs if max allowable case temperature is exceeded.

2.9 LED Driver has a failure rate of ≤0.01% per 1,000 hours at Tcase ≤70°C.

2.10 LED Driver tolerates sustained open circuit and short circuit output conditions without damage.

2.11 LED Driver complies with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR Part 15 Non-Consumer (Class B).

Section III – UL Conditions of Acceptability (File E321253)

When installed in the end-use equipment, the following are among the considerations to be made:

3.1 The equipment shall be installed in compliance with the enclosure, mounting, spacing, casualty and segregation requirements of the ultimate application.

3.2 Consideration should be given to measuring the temperatures on electronic components of power circuits and transformer windings when the unit is installed in the end-use equipment based upon mounting orientation, operating ambient and ventilation.

3.3 These drivers should be used within the recognized ratings.

3.4 The driver is suitable for use in “DAMP” and “DRY” locations.

3.5 The maximum available output parameters from the (0-10V) dimming circuit provided on LED driver model PDA150W Series were tested in accordance with supplement (SB) of UL935 and was found permissible for connection via Class 2 wiring.

3.6 When the drivers are installed in the end-use application, the case temperature should not exceed the temperature limit specified.

3.7 The maximum measured leakage current was 0.2mA while connected to a 277V source of supply.

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Electrical Specifications

Input:
AC Input Voltage Range
90VAC to 305VAC

AC Input Frequency
47~63Hz

Maximum Input Current
≤ 2A

Leakage Current
0.5mA maximum at 277VAC Input

Inrush Current
≤ 30A

OUTPUT:
Power Factor
≥ 0.9

Ripple and Noise
≤5% of the Output Current

Efficiency (Typical)
94% at 230~ 277VAC
92% at 120VAC

Turn-on Delay Time
<1s maximum at nominal AC Power ON

Environmental:
Temperature

Operation	-40 to +85°C (*)
Non-operation	-40 to +85°C
Operating Humidity	10 to 95%
(*) Case Temperature	<80°C

Warranty
5 Years

EMC
EN55015/CISPR 15/FCC 47 Part 15/18 Class B

Immunity
IEC61000-4-2
IEC61000-4-3
IEC61000-4-4
IEC61000-4-5
IEC61000-4-6
IEC61000-4-8
IEC61000-4-11
IEC61000-3-2 Class C

Output Over Current Protection
The power supply will withstand continuous output overload

Short-Circuit Protection
The PSU will withstand a short circuit across the outputs without damage

Over Voltage Protection
Output is protected from no load and over voltage conditions

Dielectric Withstand (Hi-pot) Test
Primary to secondary: 4242VDC for 1 minute, 5.5mA

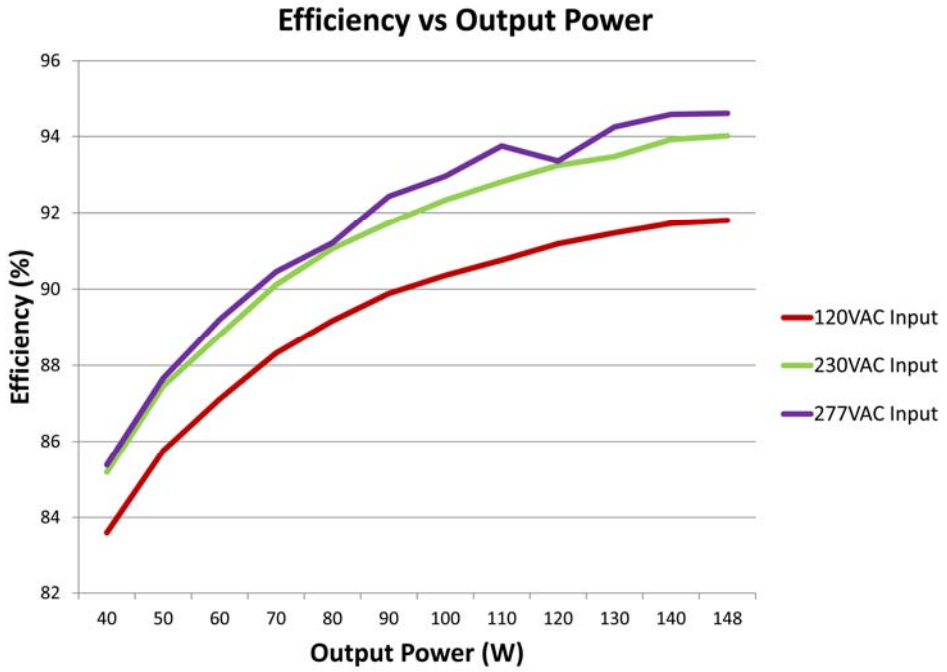
Insulation Resistance
Primary to secondary: >5M Ohm 500VDC, 1 Minute

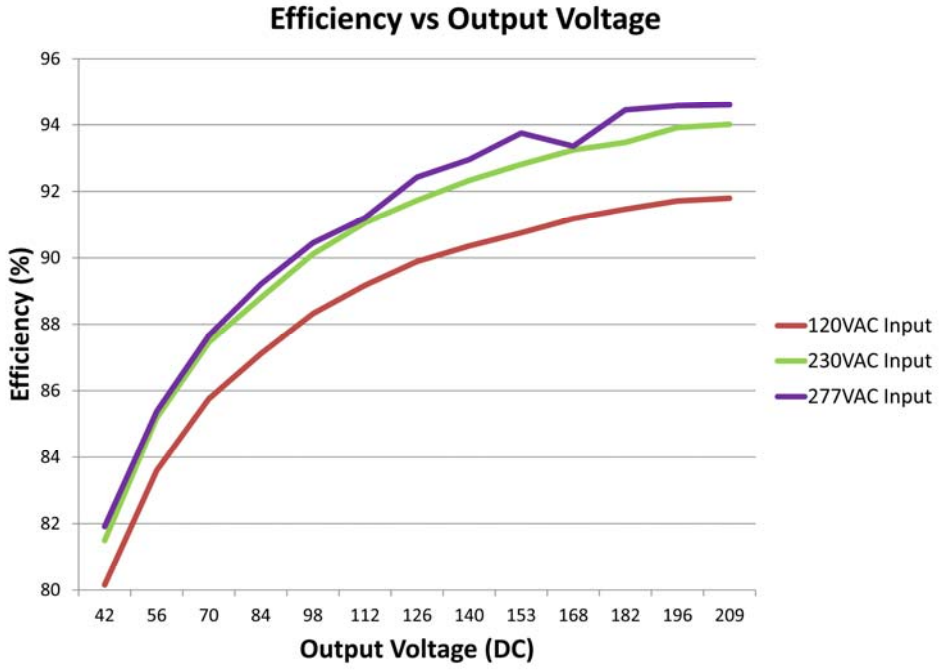
Lifespan
50K Hours at full output power, 50°C ambient, Tcase <80°C

Wire Connections

Position	Terminal Color	Specification
Line	Black	AWG18 Solid Wire
Neutral	White	AWG18 Solid Wire
Ground	Green/Yellow	AWG18 Solid Wire
Vout+	Red	AWG18 Solid Wire
Vout-	Blue	AWG18 Solid Wire

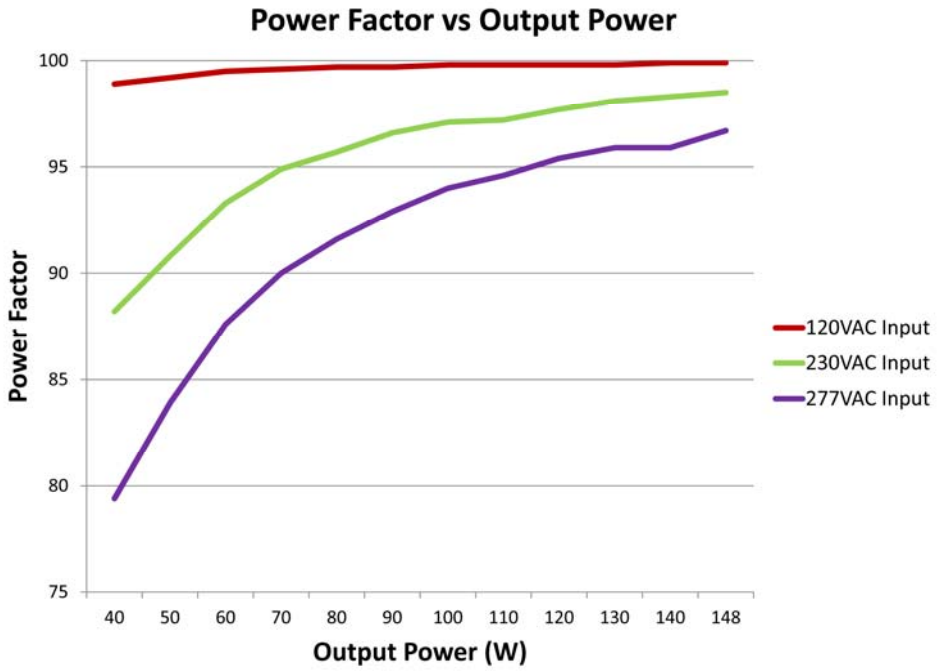
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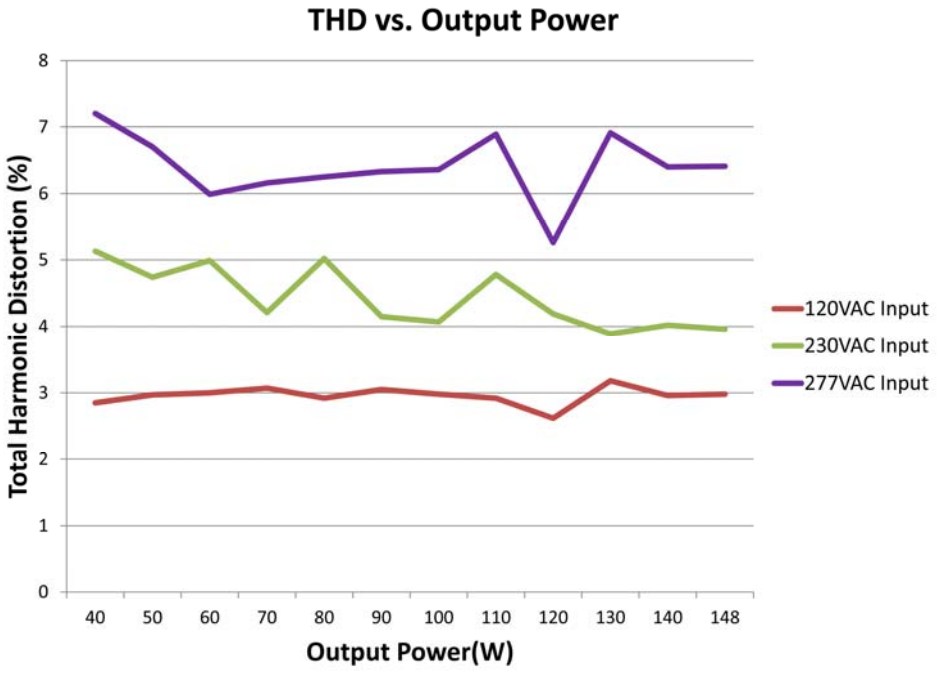




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