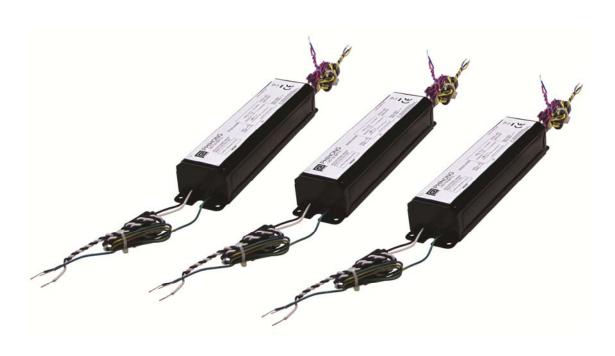


# PHIHONG'S 150W CONSTANT CURRENT DRIVERS WITH 94% EFFICIENCY

# 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	
II Kaung	11 00	

#### **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								PDA150B-S350G-R
150	0V~280V	0.53								PDA150B-S530G-R
150	0V~210V	0.7	80	1.4A@120VAC	164	< 30A	12	0.9	4.0	PDA150B-S700G-R
150	0V~140V	1.05	80	0.6A@277VAC	104	≥ 30A	12	0.9	4.0	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

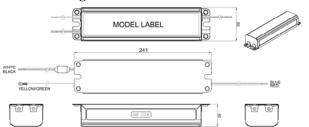


Length:	241mm (9.49in)
Width:	59mm (2.32in)
Height:	39mm (1.54in)
Weight	1043g (2.3lbs)

#### **Maximum Wiring Distance (at Full Load)**

Distance (Feet)
8
13
21
34
54
85
137
210
357

#### **Dimension Diagram**







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	

#### **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  $\leq$ 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.
- LED Driver has a failure rate of  $\leq 0.01\%$  per 1,000 hours at Tcase  $\leq 70$ °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.



# 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**

Input:

**AC Input Voltage Range** 

90VAC to 305VAC

**AC Input Frequency** 

47~63Hz

**Maximum Input Current** 

 $\leq$  2A

Leakage Current

0.5mA maximum at 277VAC Input

**Inrush Current** 

 $\leq 30A$ 

**OUTPUT:** 

**Power Factor** 

 $\geq 0.9$ 

**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%

Operating Humidity 10 to 9 (\*) 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

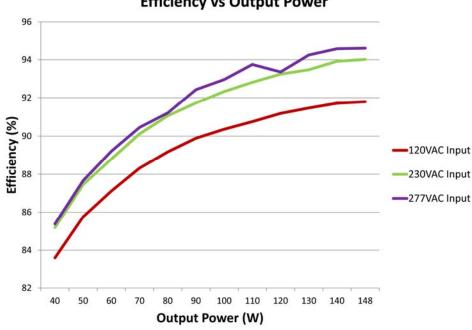
#### Wire Connections

Position	<b>Terminal Color</b>	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

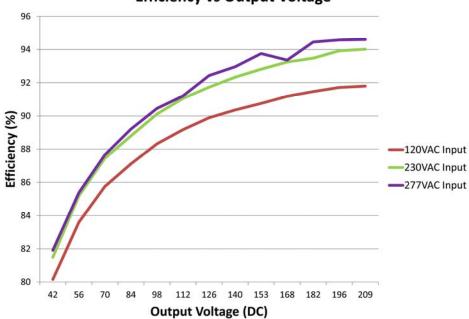


PDA150B Series		
Brand Name	Phihong LED Driver	
Description	150W, Non-Dimmable LED Driver	
Input Voltage	120 ~ 277VAC	
Input Frequency	50/60Hz	
Safety	CE, UL, RoHS	
IP Rating	IP66	





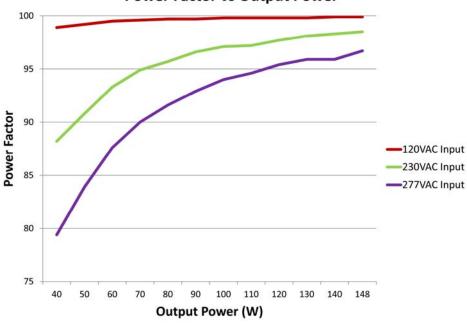
# **Efficiency vs Output Voltage**



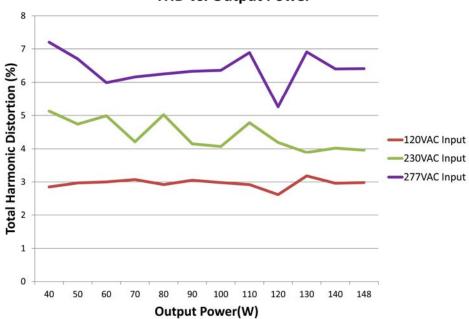


PDA150B Series		
Brand Name	Phihong LED Driver	
Description	150W, Non-Dimmable LED Driver	
Input Voltage	120 ~ 277VAC	
Input Frequency	50/60Hz	
Safety	CE, UL, RoHS	
IP Rating	IP66	





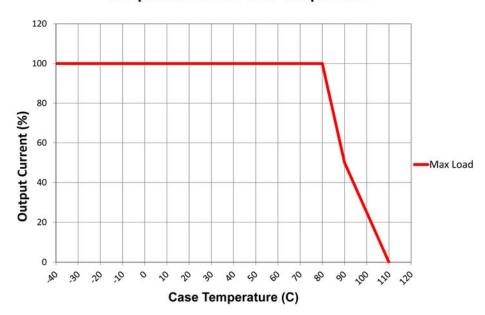
### **THD vs. Output Power**





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	

# **Output Current vs. Case Temperature**



# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for LED Power Supplies category:

Click to view products by Phihong manufacturer:

Other Similar products are found below:

ESS015W-1000-12 PDA-WIFI PIFC-K250F PITB-K222A ALD-514012PJ134 LB240S24KH LMH020-SPLC-0000-0000001 LMD600-0100-C1A7-7030000 79534 79535 EUG-200S210DT ESS030W-1050-21 ESS030W-0900-32 BPOXL 4-12-035 ESS010W-0350-24 ESM060W-1400-42 PDA080B-1A0G PDA150B-S1A5G ZPS-20 SLM140W-1.05-130-ZA ESS015W-0700-18 EUD-150S350DVA LWA320-C420-ARK-B HVG-240-48AB HVG-320-36AB HVG-320-54AB ELG-240-C1400AB EUK-150S105DV BXCS-12Z-N2P-B1-A BXPR-WN-01-A LN1224CV BXCS-12W-N2P-01-A HBG-160-24AB 980100001200394 980060001200376 LC 14W 250-350MA FLEXC R ADV2 LC 24W 500-600MA FLEXC R ADV2 LC 36W 850-900MA FLEXC R ADV2 LC 18W 24V ONE4ALL SC PRE LC 50W 200-350ML 170V FLEXC LP SNC4 LC 25W 200-350ML 70V FLEXC LP SNC4 LCBI 10W 350MA PHASE-CUT/1-10V LP LC 13W 300MA FIXC C SNC LC 10W 250MA FIXC SC SNC2 LC 35W 800MA FIXC SR ADV2 LC 38W 900MA FIXC SR ADV2 LC 34W 800MA FIXC SC ADV2 LC 44W 1050MA FIXC SC ADV2 LC 38W 900MA 42V FIXC SRL ADV2 PWM-40-36