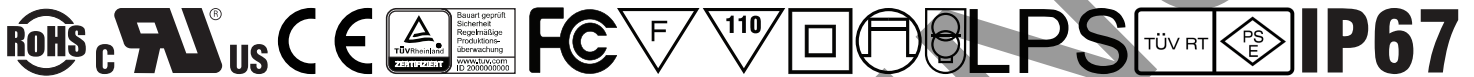
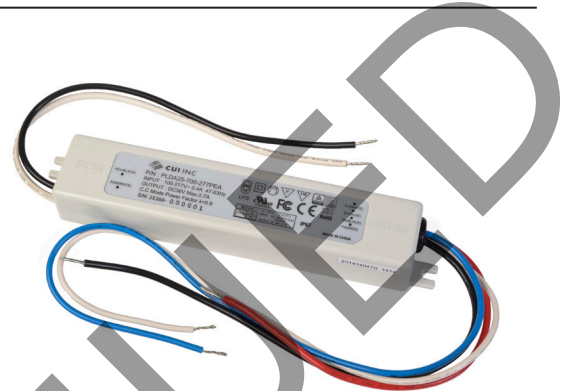


**SERIES:** PLDA25 | **DESCRIPTION:** LED DRIVER

**FEATURES**

- up to 25 W continuous power
- universal input range (90~305 Vac)
- single output
- dimming options: PWM, 1~10 Vdc
- power factor correction  $\geq 0.9$
- constant current
- low profile for easy installation
- IP67 rated
- over voltage, and continuous short circuit protection
- UL 8750, IEC/EN61347-2-13 approval
- EN61000-3-2 Class C (harmonic current) approval
- efficiency up to 86%
- suitable for LED lighting and signage applications



MODEL	output voltage range <sup>1</sup>		output current (mA)	output power max (W)	ripple and noise <sup>2</sup> max (mVp-p)	efficiency typ (%)
	min (Vdc)	max (Vdc)				
PLDA25-530-277	9	48	530	25.44	480	86
PLDA25-700-277	9	36	700	25.2	360	84
PLDA25-1100-277	9	24	1100	26.4	240	86

Notes: 1. constant current region  
 2. ripple and noise are measured at 20MHz bandwidth with a 0.1uF ceramic capacitor and 10uF aluminum capacitor.

**PART NUMBER KEY**

**PLDA25 - XXXX - 277XXX**

Base Number

Output Current

Input Voltage  
 277 = (90~305 Vac)

Dimming  
 PE = PWM, 1~10 Vdc  
 "blank" = no dimming

IP Rating  
 "blank" = IP64  
 A = IP67

**INPUT**

parameter	conditions/description	min	typ	max	units
voltage		90		305	Vac
		127		420	Vdc
frequency		47		63	Hz
current	at 115 Vac, full load		0.3		A
	at 230 Vac, full load		0.14		A
inrush current	at 240 Vac, cold start, 25°C, after 100 μs			5	A
leakage current	at 277 Vac			0.5	mA
power factor correction	at 115 Vac/230 Vac, 75~100% load	0.9			
	at 277 Vac, 100% load	0.9			
no load power consumption				1	W

**OUTPUT**

parameter	conditions/description	min	typ	max	units
current line regulation	measured from high line to low line at full load			±5	%
current load regulation	measured from min. to max. of constant current region			±5	%
constant current accuracy	at nominal input and full load			±5	%
switching frequency			60		kHz
start-up time	at 90 Vac			0.5	s
temperature coefficient			±0.05		%/°C

**PROTECTIONS**

parameter	conditions/description	min	typ	max	units
over voltage protection	TVS clamp				
short circuit protection	hiccup mode, auto recovery				

**SAFETY & COMPLIANCE**

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output, for 1 minute			3,750	Vac
isolation resistance	input to output	100			MΩ
safety approvals	UL8750, IEC/EN61347-1, IEC/EN61347-2-13, PSE				
EMI/EMC	FCC Part 15 Class B/EN55015, EN61547, EN61000-4-(2,3,4,5,6), EN61000-3-2 Harmonic Class C, EN61000-3-3				
MTBF	as per MIL-HDBK-217F, at 25°C		200,000		hours
RoHS	2011/65/EU				

**ENVIRONMENTAL**

parameter	conditions/description	min	typ	max	units
operating temperature	see derating curves	-40		70	°C
storage temperature		-40		85	°C
operating humidity	non-condensing	20		95	%
operating altitude				3,000	m

## MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	5.511 x 1.181 x 0.787 (140 x 30 x 20 mm)				inches
weight			100		g

## MECHANICAL DRAWING

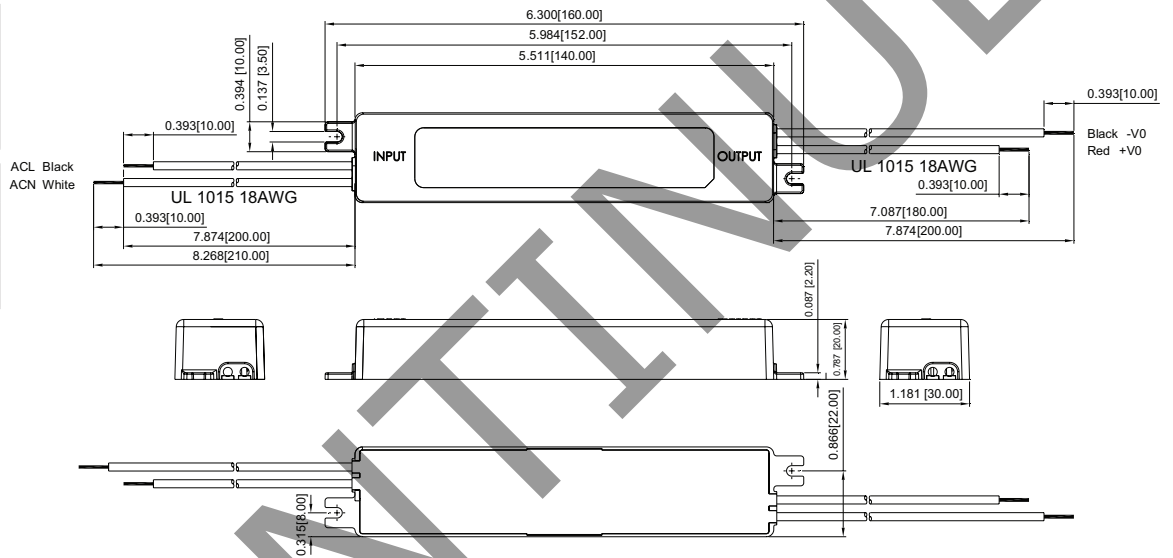
### MODELS WITHOUT DIMMING

units: inches[mm]  
 tolerance:  $\pm 0.02[\pm 0.5]$   
 unless otherwise specified

INPUT WIRE CONNECTIONS	
Color	Function
Black	ACL
White	ACN

OUTPUT WIRE CONNECTIONS	
Color	Function
Red	+Vo
Black	-Vo



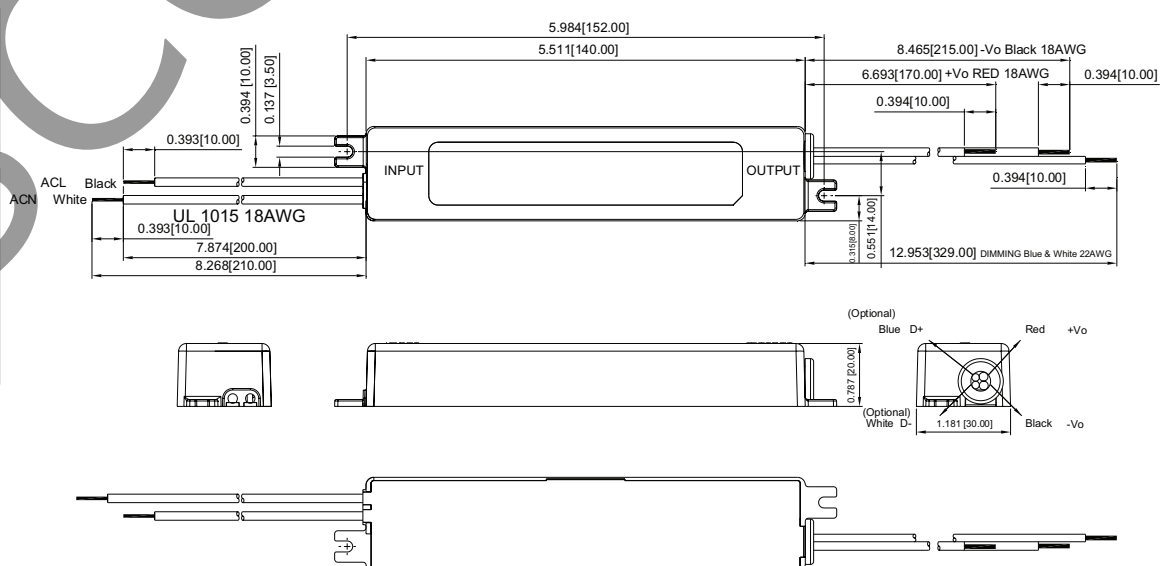
### MODELS WITH DIMMING

units: inches[mm]  
 tolerance:  $\pm 0.02[\pm 0.5]$   
 unless otherwise specified

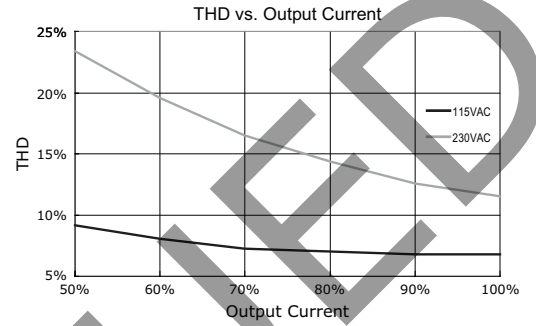
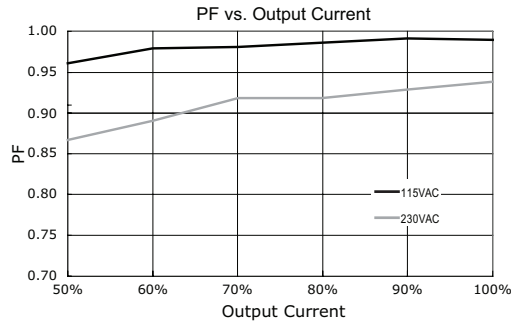
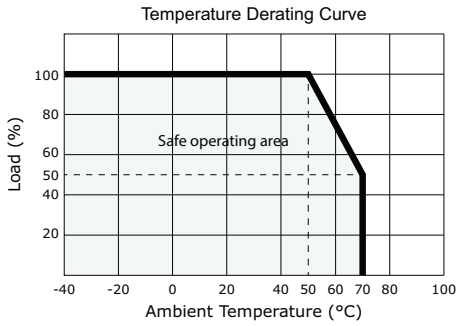
INPUT WIRE CONNECTIONS	
Color	Function
Black	ACL
White	ACN

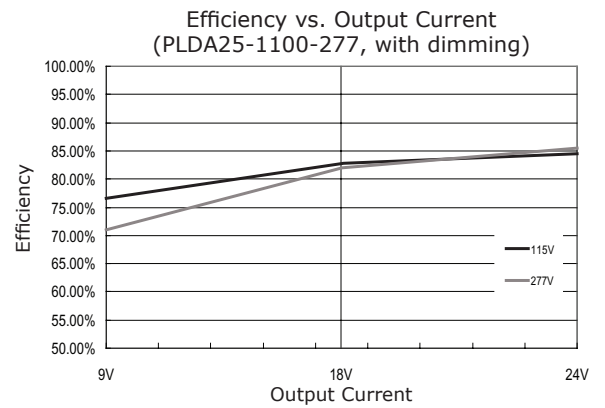
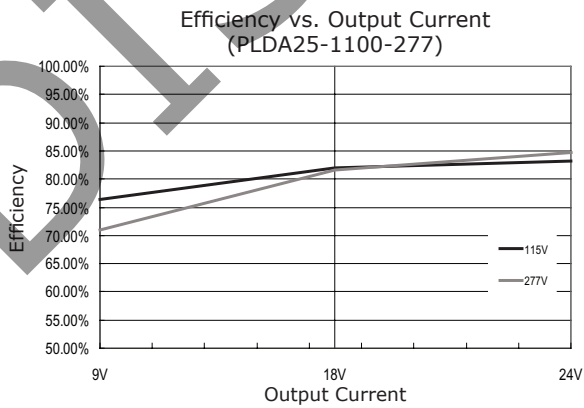
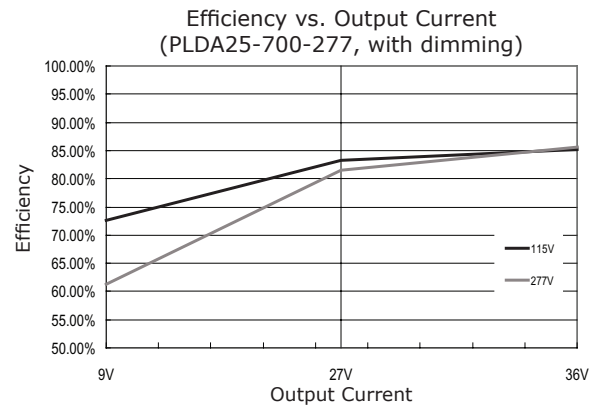
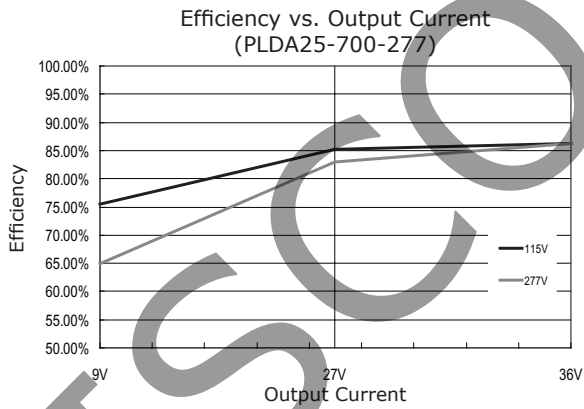
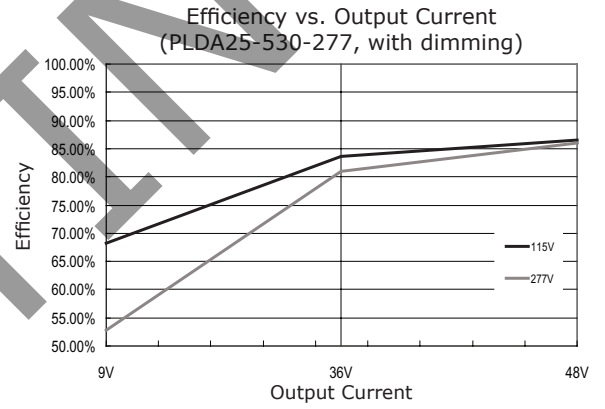
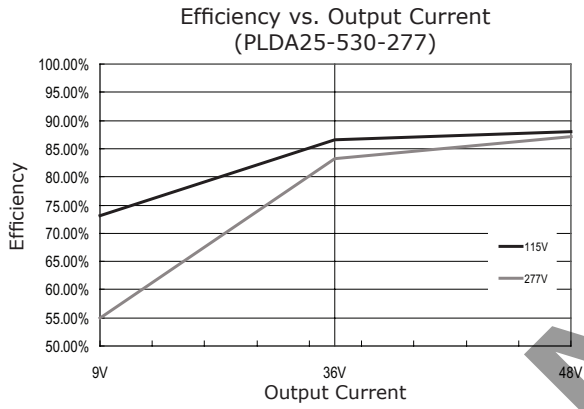
OUTPUT WIRE CONNECTIONS	
Color	Function
Red	+Vo
Black	-Vo
Blue	D+
White	D-



## DERATING CURVES



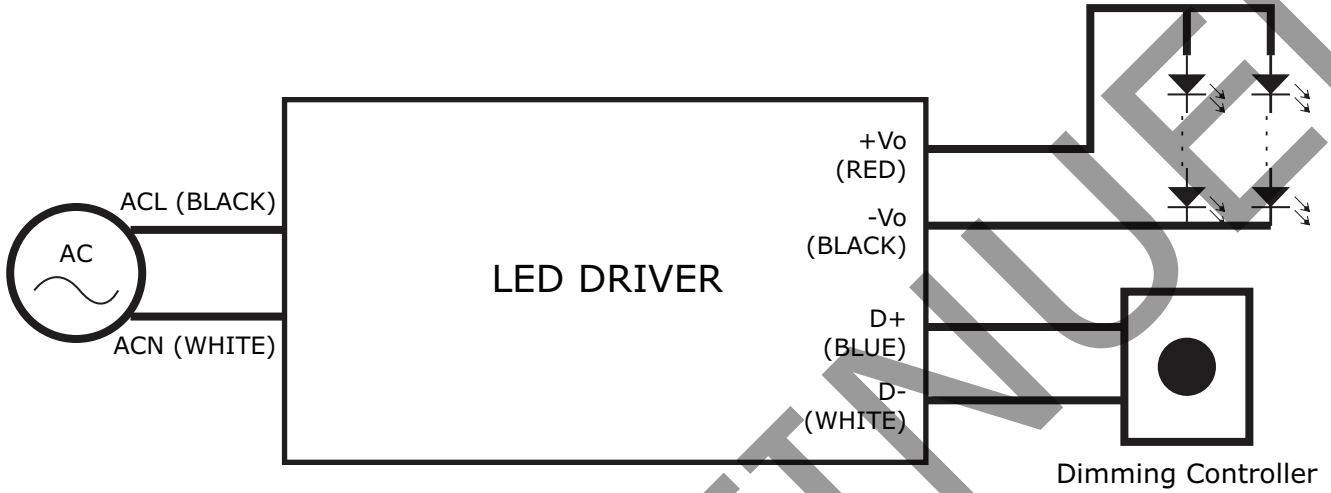
## EFFICIENCY CURVES



## APPLICATION NOTES

### 1. Dimming

Dimming should be controlled from the dimming controller with PWM or 1~10 Vdc.



#### 1~10 Vdc Dimming

Voltage	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V (open)
Output Current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

#### PWM Dimming (@ 1kHz, 10V)

Duty Cycle	10%	20%	30%	40%	50%	60%	70%	80%	90%	100% (open)
Output Current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

## REVISION HISTORY

rev.	description	date
1.0	initial release	09/22/2014

The revision history provided is for informational purposes only and is believed to be accurate.



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CUI offers a two (2) year limited warranty. Complete warranty information is listed on our website.

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