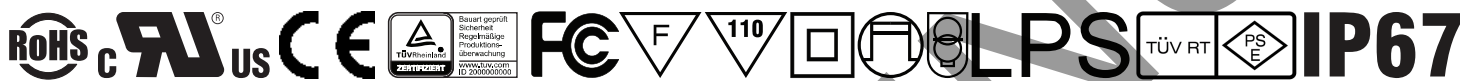


SERIES: PLDA60 | **DESCRIPTION:** LED DRIVER

FEATURES

- up to 60 W continuous power
- universal input range (90~305 Vac)
- single/dual output
- dimming options: PWM, 1~10 Vdc, resistive, DALI
- power factor correction ≥ 0.9
- constant current
- low profile for easy installation
- IP67 rated
- over voltage, continuous short circuit, and over temperature 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 ¹			output current	output power	ripple and noise ²	efficiency
	min (Vdc)	max (Vdc)		(mA)	max (W)	max (mVp-p)	typ (%)
PLDA60-1250-277	9	48		1250	60	480	86
PLDA60-1666-277	9	36		1666	60	360	85
PLDA60-2500-277	9	24		2500	60	240	85
PLDA60-D625-277	9	48	Io1	625	30	480	87
			Io2	625	30		
PLDA60-D833-277	9	36	Io1	833	30	360	85
			Io2	833	30		
PLDA60-D1250-277	9	24	Io1	1250	30	240	85
			Io2	1250	30		

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

PLDA60 - **XXXXX** - 277**XXA**

Base Number

Output
 "blank" = single
 D = dual

Output Current

Input Voltage
 277 = (90~305 Vac)

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

IP Rating
 A = IP67

INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		305	Vac
		127		420	Vdc
frequency		50		60	Hz
current	at 115 Vac, full load		0.69		A
	at 230 Vac, full load		0.32		A
inrush current	at 240 Vac, cold start, 25°C, after 100 μs			5	A
leakage current	at 277 Vac			0.75	mA
power factor correction	at 115 Vac/230 Vac, 75~100% 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				
over temperature protection			105		°C

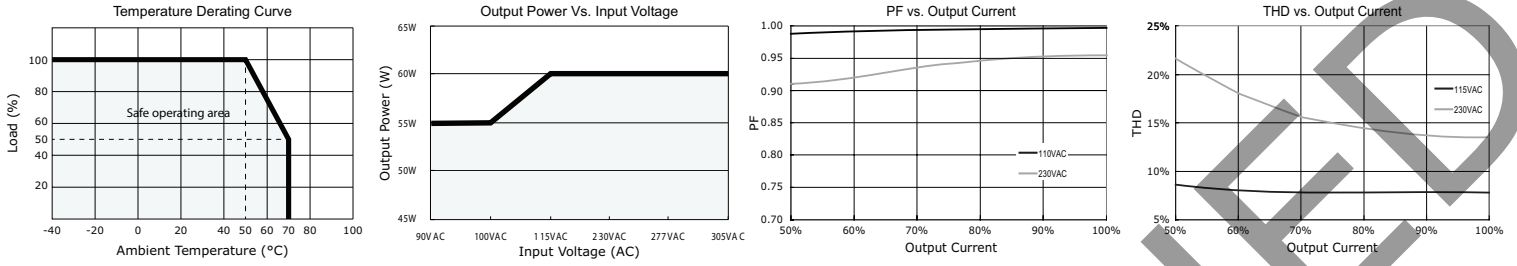
SAFETY & COMPLIANCE

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				
DALI	IEC62386-102, IEC62386-207				
EMI/EMC	FCC Part 15 Class B/EN55015, EN61547, EN61000-4-(2,3,4,5,6,8,11), 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				

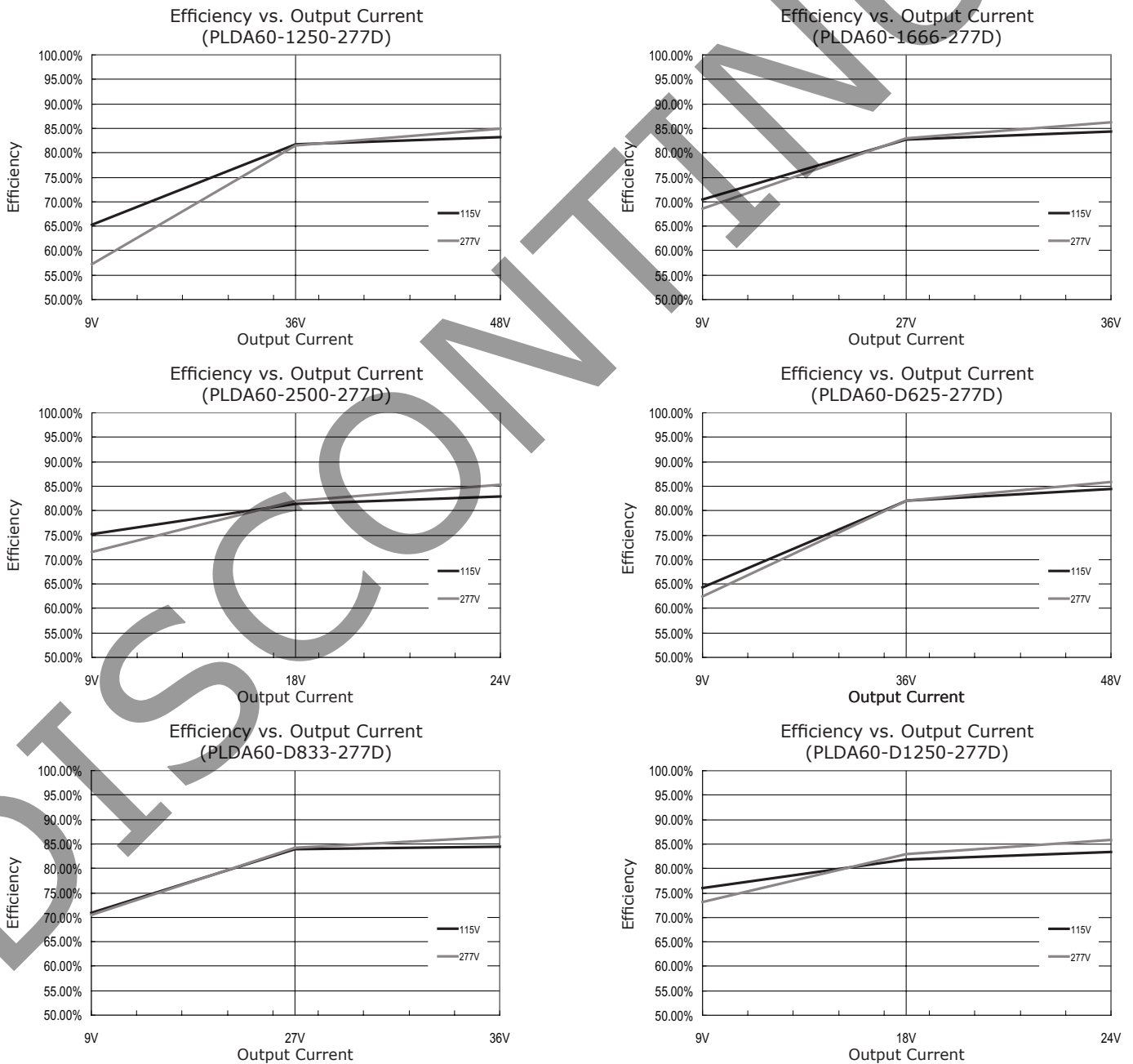
ENVIRONMENTAL

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

DERATING CURVES



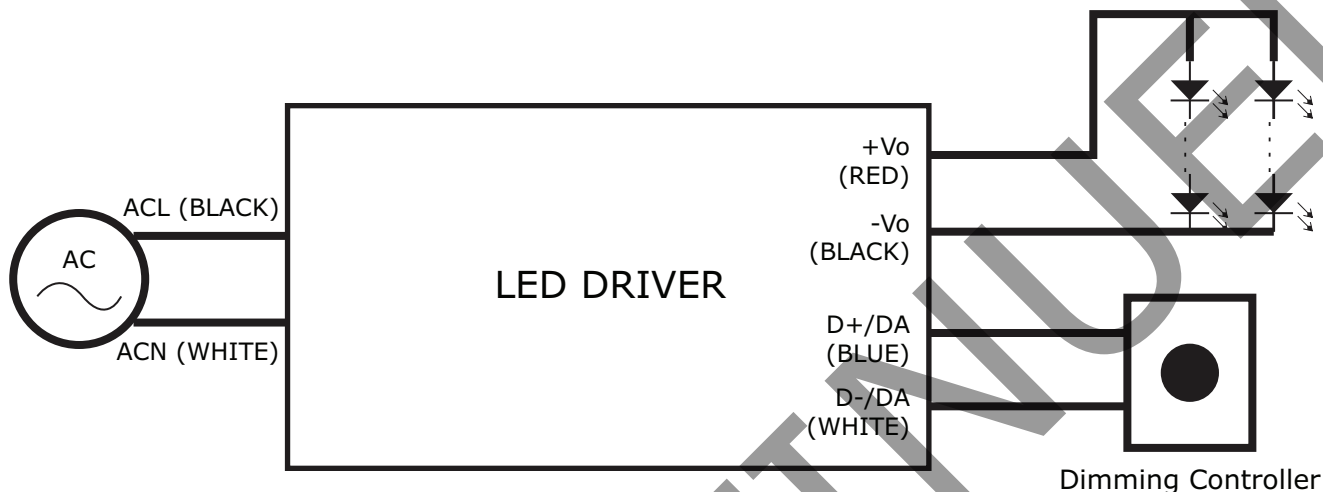
EFFICIENCY CURVES



APPLICATION NOTES

1. Dimming

Dimming should be controlled from the dimming controller with DALI, PWM, 1~10 Vdc, or resistive. Set the DALI controller to "broadcast mode" when connecting to the LED driver, since it will not be addressed in production.



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%

Potentiometer Dimming

Potentiometer	1K	2K	3K	4K	5K	6K	7K	8K	9K	10K (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%

Note: 1. All specifications are measured at Ta=25°C, 115/230 Vac input voltage, and full load unless otherwise specified.

REVISION HISTORY

rev.	description	date
1.0	initial release	09/23/2014
1.01	updated datasheet	03/13/2015

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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