

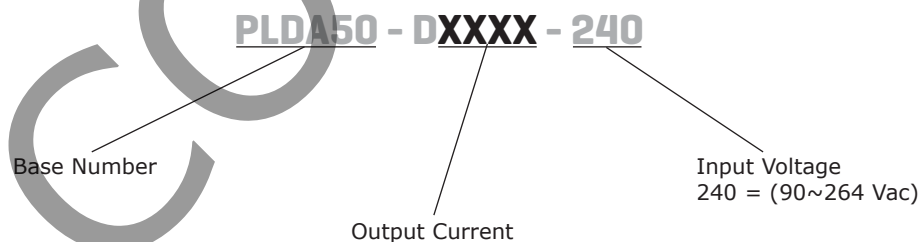
SERIES: PLDA50 | DESCRIPTION: LED DRIVER
FEATURES

- up to 50 W continuous power
- universal input range (90~264 Vac)
- dual output
- power factor correction ≥ 0.9
- constant current
- low profile for easy installation
- 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 ¹		output current (mA)	output power max (W)	ripple and noise ² max (mVp-p)	efficiency typ (%)
	min (Vdc)	max (Vdc)				
PLDA50-D600-240	18	42	Io1 600 Io2 600	25.2 25.2	300	86
PLDA50-D1000-240	8	24	Io1 1000 Io2 1000	24 24	300	85

Notes: 1. Constant current region
 2. Ripple and noise measured at full load, 100 Vac input, 20 MHz bandwidth with a 0.1 uF ceramic capacitor across the output. $V_o = 36$ Vdc for PLDA50-D600-240 and 21 Vdc for PLDA50-D1000-240.

PART NUMBER KEY


INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		50		60	Hz
current	at 100 Vac, full load			0.65	A
inrush current	at 230 Vac, cold start, 25°C, after 400 μ s			5	A
leakage current	at 230 Vac			3.5	mA
power factor correction	at 100 Vac/230 Vac, 85~100% load	0.9			

OUTPUT

parameter	conditions/description	min	typ	max	units
current line regulation	measured from high line to low line			\pm 5	%
current load regulation	measured from max. to min. of constant current region			\pm 5	%
constant current accuracy				\pm 5	%
start-up time	at 100 Vac			1.6	s
temperature coefficient			\pm 0.03		%/°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 input to ground for 1 minute			3,750 1,500	Vac Vac
isolation resistance	input to output	100			M Ω
safety approvals	UL8750, IEC/EN61347-1, IEC/EN61347-2-13, PSE				
EMI/EMC	EN55022/EN55015 Class B, 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 humidity	non-condensing	10		80	%
operating altitude				3,000	m
vibration	0~500 Hz, 60 min. along each X, Y, and Z axes		2		G

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	300 x 36.1 x 24.5				mm
weight			230		g

MECHANICAL DRAWING

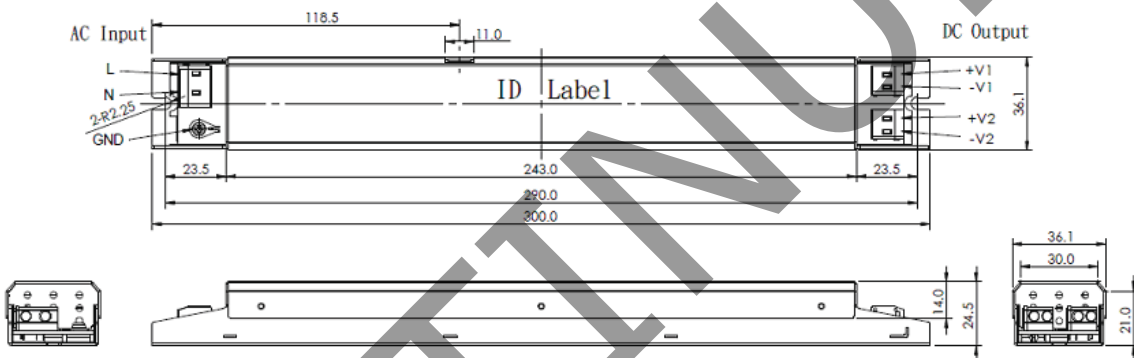
units: mm
 tolerance: x.x = ±0.5
 x.xx = ±0.25
 unless otherwise specified

wire range: 20~14 AWG

CN1	
Pin	Function
1	ACL
2	ACN

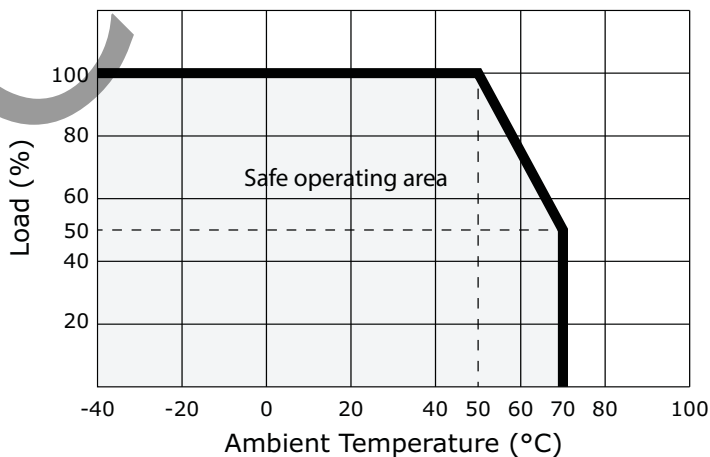
CN2	
Pin	Function
1	+V1
2	-V1

CN3	
Pin	Function
1	+V2
2	-V2



DERATING CURVES

Temperature Derating Curve



Note: 1. CN1: WAGO 235-502 or equivalent
 2. CN2 & CN3: WAGO 235-402 or equivalent
 3. 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	09/16/2014

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



Headquarters
20050 SW 112th Ave.
Tualatin, OR 97062
800.275.4899

Fax 503.612.2383
cui.com
techsupport@cui.com

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

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.