



KTLD-100-UV-P2800-55-VDIM-XX-LT2-HSP

CONSTANT CURRENT PROGRAMMABLE LED DRIVER

DESCRIPTION

LED Driver | 96W | 120-277V Input | 280-2800mA Programmable Output Current

Class 2 Class P **10 YEAR LIMITED WARRANTY**

TOTAL POWER: 96W	OUTPUT CURRENT: 280-2800mA
INPUT VOLTAGE: 120-277Vac $\pm 10\%$	DIMMING: 0-10V
INPUT FREQUENCY: 50/60 Hz	WARRANTY: 10 Year Limited



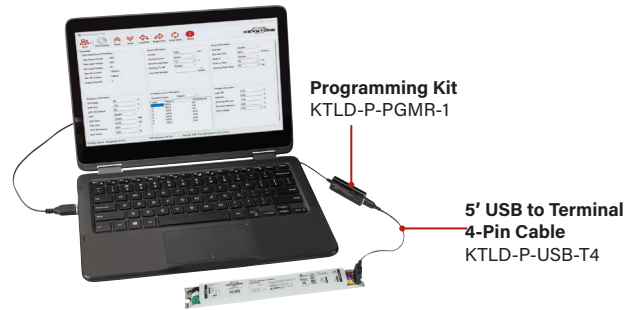
PRODUCT FEATURES

- Linear Form Factor, Metal Casing
- 0-10V Dimming, Compliant with ANSI C137.1
- True 1% Dimming over full Output Current Range
- Programmable Output in 1mA Increments
- Flicker Free, T24: JA8 & IEE1789 Compliant
- Programmable Settings via Keystone Programming Kit
- For Indoor Applications
- Class A Sound Rating
- Optional 12-24V Programmable Aux Power
- High Surge Protection, 6 kV

PROGRAMMING FEATURES

- Output Current Set Range: 280-2800 mA
- Minimum Output Current: 2.8mA
- Minimum Dimming Level (1-10%, 0.5% Increments)
- Dimming Curve (Linear, Log, Square)
- Dim to Off (Enable/Disable)
- Luminous Decay Compensation (Enable/Disable)
- End of Life Feedback (Enable/Disable)
- Thermal Foldback Temperature Selection

WHAT'S NEEDED? The Programmable LED Driver, the Programming Kit, the Connection Cable, and a computer.



ELECTRICAL SPECIFICATIONS

Input Voltage Range	120-277Vac $\pm 10\%$
Frequency	50/60 Hz
Power Factor	>0.9 at 20-100% Load, Vin @ 120Vac or 45-100% Load, Vin @ 277Vac
Inrush Current	22.2 A _{peak} , i ² t = 0.92 A ² s @ 120V, 51.2 A _{peak} , i ² t = 0.472 @ 277V
Max. Input Current	<1.1A (Vin @ 120Vac) at full load condition
THD	<20% for 20-100% Load, Vin @ 120Vac or 45-100% Load, Vin @ 277Vac
Load Regulation	$\pm 5\%$
Line Regulation	$\pm 1\%$
Output Tolerance	$\pm 5\%$ at full load condition
Turn-On Delay Time	<0.5 seconds at full load condition
Overshoot	<10% at full load condition
No Load Power Consumption	<2W
Ripple and Noise (pk-pk)	<10%
Leakage Current	<0.75 mA at Vin @ 277Vac, 60Hz
Protection	- Over Voltage Protection: Latch mode. Protection will trigger when load voltage exceeds specified output voltage and will auto recover after the fault mode is removed. - Over Current Protection: Hiccup mode. Protection will trigger when load current exceeds specified output current and will auto recover after the fault mode is removed. - Short Circuit Protection: Hiccup mode. Protection will trigger when short circuit and will auto recover after the fault mode is removed. - Over Temperature Protection: Protection will trigger when driver overheats and auto-recovery when cooled down.
Surge Rating	6kV, ANSI/IEEE C62.41
Dimming Sink Current	200uA

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PRODUCT SPECIFICATIONS

Max. Output Power	Output Current	Output Voltage	OCV	Typical Efficiency at 120V	Typical Efficiency at 277V	Remote Mounting Distance (#18 AWG)	Class 2	
							US	Canada
96W	280-2800mA	10-55V	60V	88%	90%	24 ft.	✓	✓

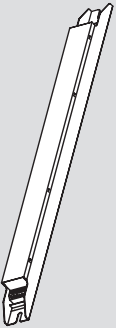
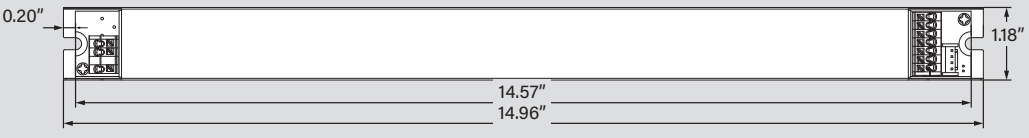
OPTIONAL AUX POWER SPECIFICATIONS

Max. Output Power	Voltage Range
1W	12-24V Programmable

WIRING SPECIFICATIONS

INPUT	Terminal Block
OUTPUT	Terminal Block
DIMMING	Terminal Block

PHYSICAL SPECIFICATIONS

	LENGTH	14.96"
	WIDTH	1.18"
	HEIGHT	1.0"
	MOUNTING	14.57"
	CASE STYLE	LT2
	CASE MATERIAL	Metal
Top View		
		
Side View		
		

Wiring

KTLD-100-UV-P2800-55-VDIM-LT2-HSP (without AUX)

Black: Line			Blue: LED (-) LED load, negative
White: Neutral			Red: LED (+) LED load, positive
Green: Ground			Gray: NC No Connection
			Brown: NC No Connection
			Black: NC No Connection
			Purple: DIM (+) Dimming, positive
			Gray: NC No Connection
			Pink: DIM (-) Dimming, negative
			Yellow: NC No Connection

KTLD-100-UV-P2800-55-VDIM-CR-LT2-HSP (with AUX)

Black: Line			Blue: LED (-) LED load, negative
White: Neutral			Red: LED (+) LED load, positive
Green: Ground			Gray: NC No Connection
			Brown: NC No Connection
			Black: NC No Connection
			Purple: DIM (+) Dimming, positive
			Gray: NC No Connection
			Pink: DIM (-) / AUX (-) Dimming & AUX, negative
			Yellow: AUX (+) AUX positive

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-30°C/-22°F to 55°C/131°F
Storage Temperature	-40°C/-40°F to 85°C/185°F
Humidity	10% to 95% RH
MTBF	>200,000 hours at Full Load, 25°C/77°F Ambient Temperature
Life Rating	>50,000 Hours at Full Load, 80°C/176°F Case Temperature
Maximum Case Temperature	90°C/194°F
Maximum Case Temperature (tc) for 5-Year Warranty	80°C/176°F

SAFETY AND EMC COMPLIANCE

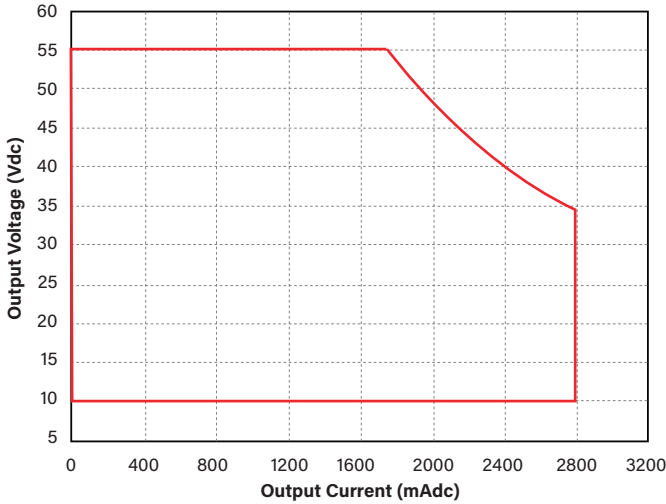
UL/cUL	UL 8750 Class P, CAN/CSA-C22.2 No. 250.13
ANSI C82.77-5-2015	Category B 6kV
FCC, 47CFR Part 15	Class B at 120Vac Input, Class A at 277Vac Input

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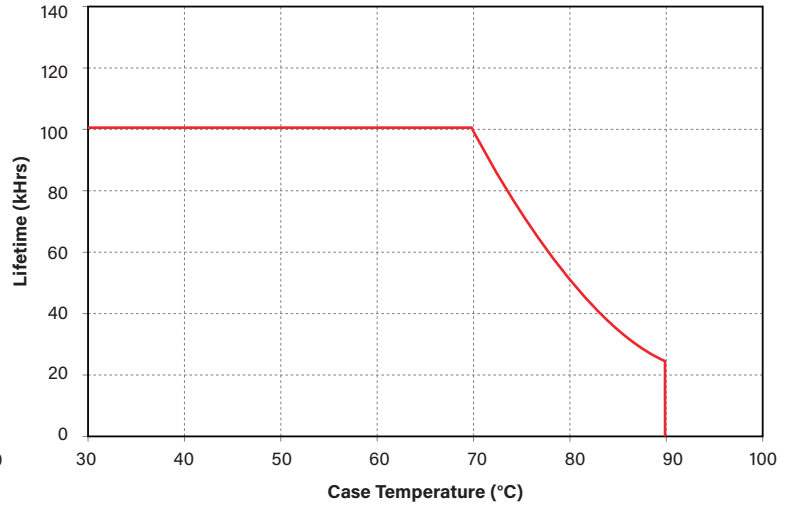
CHARACTERISTIC CURVES

LED DRIVER OUTPUT WINDOW

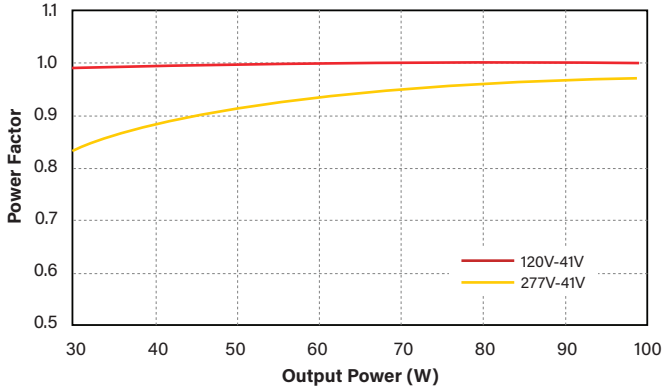


Note: driver is in constant power mode from 1745mA to 2800mA.

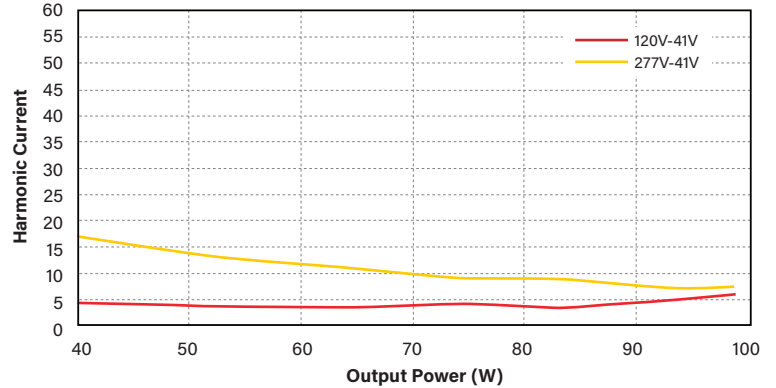
LIFETIME VS CASE TEMPERATURE



POWER FACTOR VS OUTPUT POWER



THD VS OUTPUT POWER





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ORDERING INFORMATION

Catalog Number	Carton QTY	UPC	Easy Code
KTLD-100-UV-P2800-55-VDIM-LT2-HSP	20	843654177816	WFQ-19
KTLD-100-UV-P2800-55-VDIM-CR-LT2-HSP	20	843654178059	QIH-12

CATALOG NUMBER BREAKDOWN

KTLD-100-UV-P2800-55-VDIM-XX-LT2-HSP

1	2	3	4	5	6	7	8	9	10
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- 1 Keystone Technologies LED Driver
- 2 Nominal Output Wattage
- 3 120-277V Input
- 4 Programmable
- 5 Max. Output Current
- 6 Max. Output Voltage
- 7 0-10V Dimming
- 8 Aux Power
- 9 Case Style
- 10 High Surge Protection

8 Aux Power

	No Aux
CR	Aux