


**SMART CURRENT
FLEX**

KTLD-85-UV-P2300-55-VDIM-XX-LT2

CONSTANT CURRENT PROGRAMMABLE LED DRIVER

DESCRIPTION

LED Driver | 85W | 120–277V Input | 230–2300mA Programmable Output Current

Class P **10 YEAR LIMITED WARRANTY**

TOTAL POWER: 85W	OUTPUT CURRENT: 230–2300mA
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

PROGRAMMING FEATURES

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

- Output Current Set Range: 230–2300 mA
- Minimum Output Current: 2.3mA
- 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

**5' USB to Terminal
4-Pin Cable**
KTLD-P-USB-T4



Programming Kit
KTLD-P-PGMR-1

ELECTRICAL SPECIFICATIONS

Input Voltage Range	120–277Vac $\pm 10\%$
Frequency	50/60 Hz
Power Factor	>0.95 at 20–100% Load, Vin @ 120Vac, >0.90 at 50–100% Load, Vin @ 277Vac
Inrush Current	$22.2 A_{peak}$, $i^2t = 0.092 A^2s$ @ 120V, $51.2 A_{peak}$, $i^2t = 0.472$ @ 277V
Max. Input Current	$<0.89A$ (Vin @ 120Vac), $<0.44A$ (Vin @ 240 Vac), $<0.42A$ (Vin @ 277 Vac)
THD	$<20\%$ for 20–100% Load, Vin @ 120Vac or 50–100% 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 700–2300mA setting, <0.8 seconds at 230–699mA setting
Overshoot	$<10\%$ at full load condition
No Load Power Consumption	$<2W$
Ripple and Noise (pk-pk)	$<3\%$
Withstand Voltage	Input to output, 2,800Vdc, 2mA
Leakage Current	<0.75 mA at Vin @ 277Vac, 60Hz
Protection	• Over Voltage Protection: Hiccup 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	2.5 kV Ring Wave, 2 kV Combination Wave
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
85W	230–2300mA	10–55V	60V	88% @ 1600 mA, 55V	90% @ 1600 mA, 55V	24 ft.	✓	✓

OPTIONAL AUX POWER SPECIFICATIONS

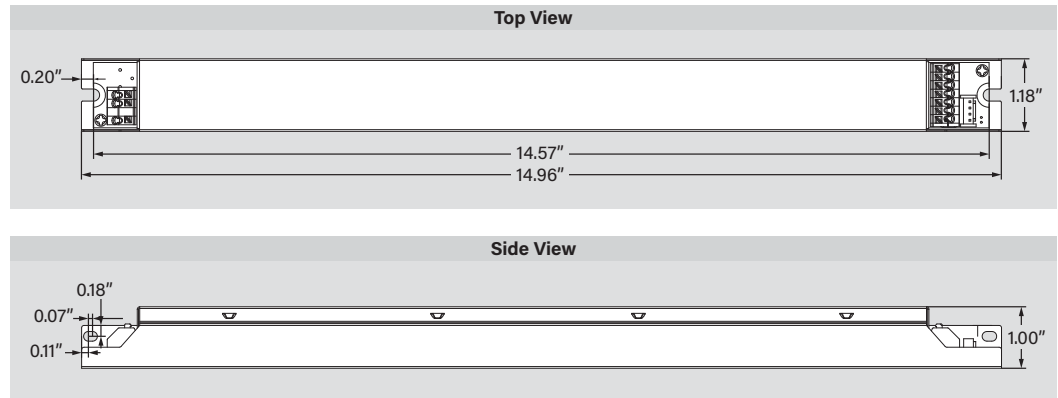
Max. Output Power	Voltage Range
1W	12-24V Programmable

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



Wiring

KTLD-85-UV-P2300-55-VDIM-LT2 (without AUX)

Black: Line		Blue: LED (-) LED load, negative
White: Neutral		Red: LED (+) LED load, positive
Green: Ground		Black: NC No Connection
		Purple 1: DIM (+) Dimming, positive
		Purple 2: NC No Connection
		Pink: DIM (-) Dimming, negative
		Yellow: NC No Connection

KTLD-85-UV-P2300-55-VDIM-CR-LT2 (with AUX)

Black: Line		Blue: LED (-) LED load, negative
White: Neutral		Red: LED (+) LED load, positive
Green: Ground		Black: NC No Connection
		Purple 1: DIM (+) Dimming, positive
		Purple 2: 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	5% 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

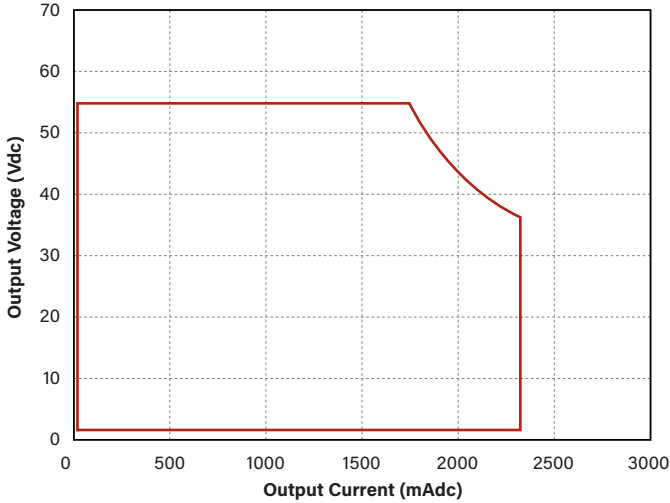
UL/cUL	UL 8750 Class P CAN/CSA-C22.2 No. 250.13
CE	EN61347-1, EN61347-2-13
FCC, 47CFR Part 15	ANSI C63.4:2009 Class B (consumer limit)
EN61000-3-2	Harmonic Current Emissions Class C



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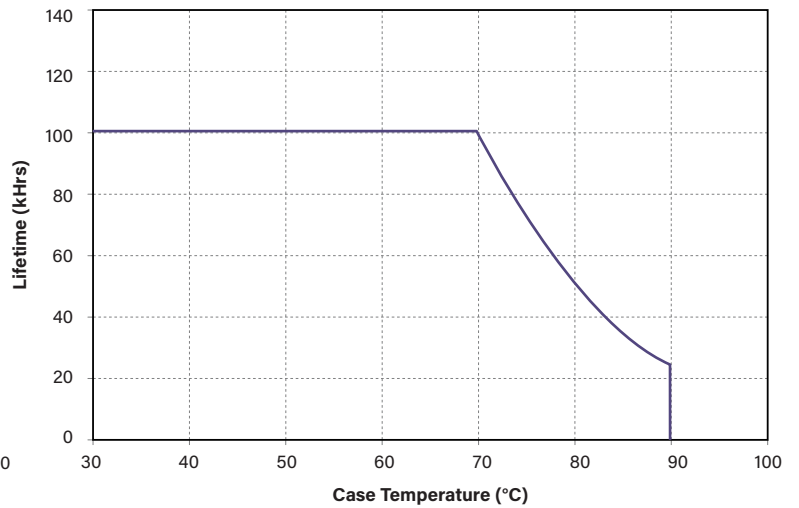
CONSTANT CURRENT PROGRAMMABLE LED DRIVER

LED DRIVER OUTPUT WINDOW

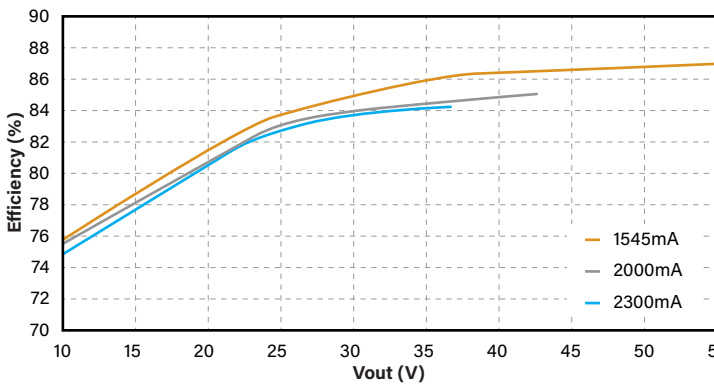


Note: driver is in constant power mode from 1545mA to 2300mA.

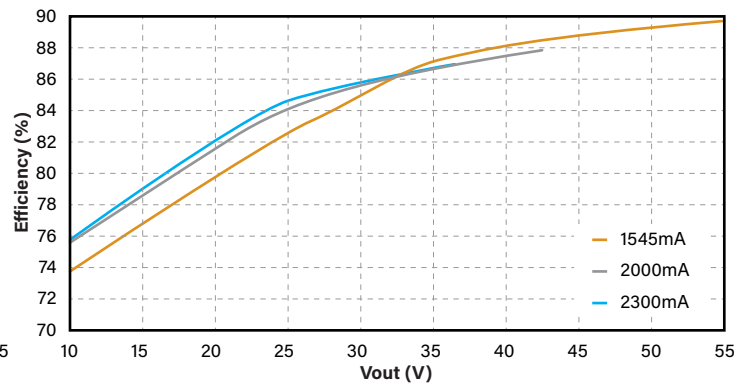
LIFETIME VS CASE TEMPERATURE



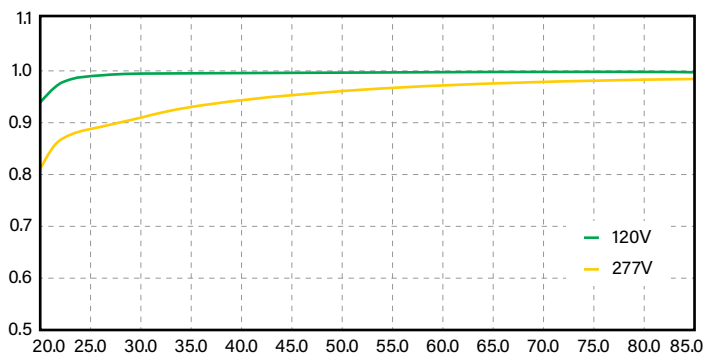
EFFICIENCY (120V)



EFFICIENCY (277V)



POWER FACTOR vs OUTPUT POWER



THD vs OUTPUT POWER

