



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

TOTAL POWER: 85W	OUTPUT CURRENT: 230–2300mA
INPUT VOLTAGE: 120–277Vac ±10%	DIMMING: 0–10V
INPUT FREQUENCY: 50/60 Hz	WARRANTY: 10 Year Limited

Class P **10 YEAR LIMITED WARRANTY**



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 ±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 ² t = 0.092 A ² s @ 120V, 51.2 A _{peak} , i ² t = 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	± 5%
Line Regulation	± 1%
Output Tolerance	± 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	<ul style="list-style-type: none"> • 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.	✓	✓

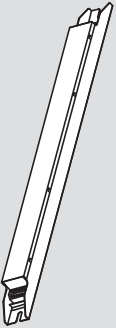
OPTIONAL AUX POWER SPECIFICATIONS

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

WIRING SPECIFICATIONS

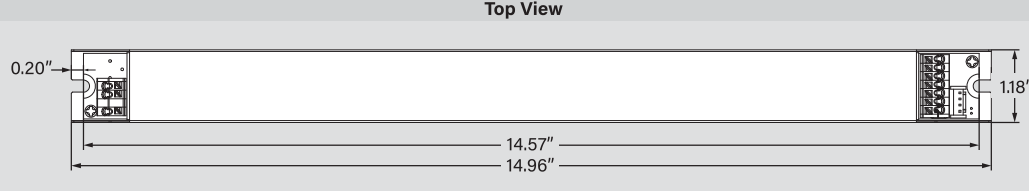
INPUT	Terminal Block
OUTPUT	Terminal Block
DIMMING	Terminal Block

PHYSICAL SPECIFICATIONS

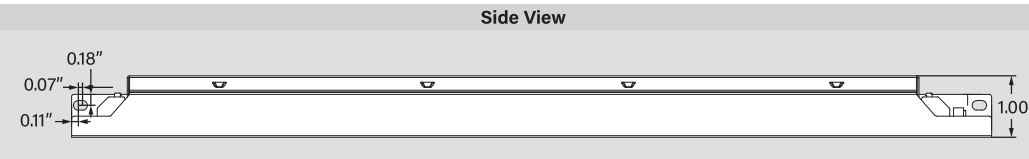


LENGTH	14.96"
WIDTH	1.18"
HEIGHT	1.0"
MOUNTING	14.57"
CASE STYLE	LT2
CASE MATERIAL	Metal

Top View



Side View



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

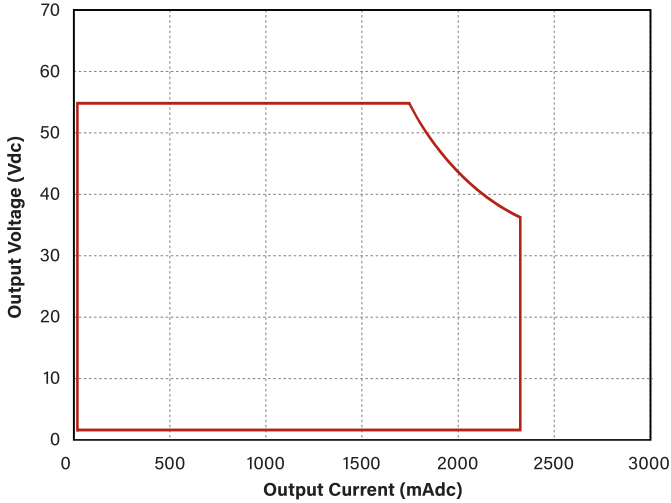
UL/cUL	UL 8750 Class P CAN/CSA-C22.2 No. 250.13
CE	EN61347-1, EN61347-2-13
FCC, 47CFR Part 15	ANSI C63.4:2009 Class B (consumer limit)
EN61000-3-2	Harmonic Current Emissions Class C



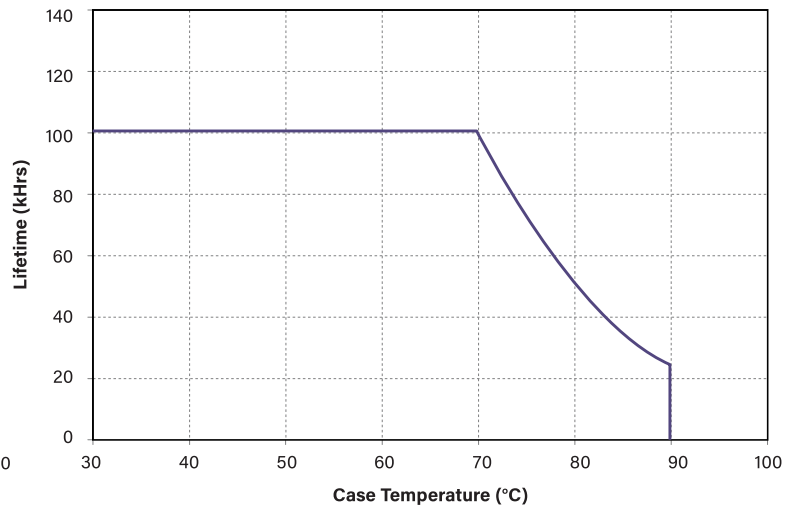
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CONSTANT CURRENT PROGRAMMABLE LED DRIVER

LED DRIVER OUTPUT WINDOW

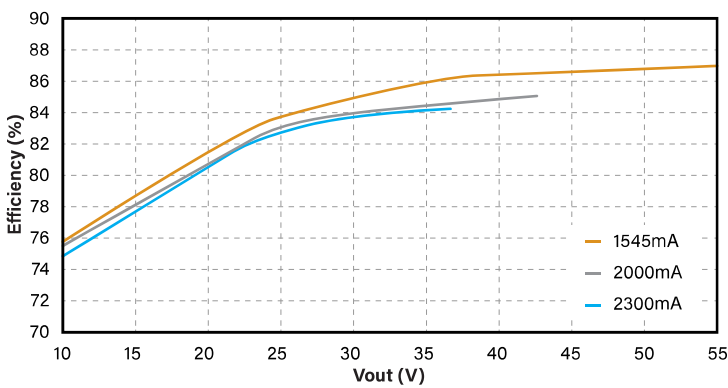


LIFETIME VS CASE TEMPERATURE

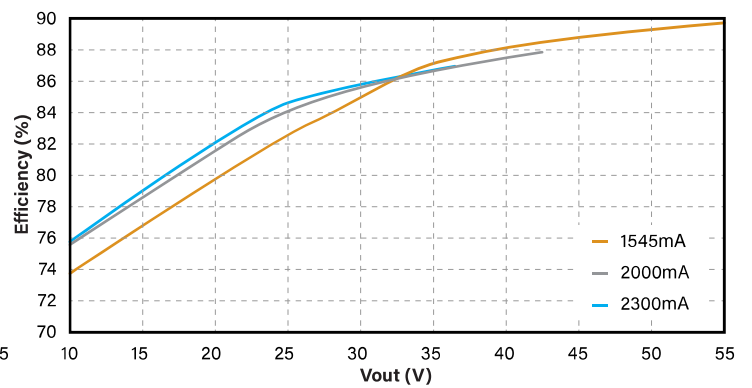


Note: driver is in constant power mode from 1545mA to 2300mA.

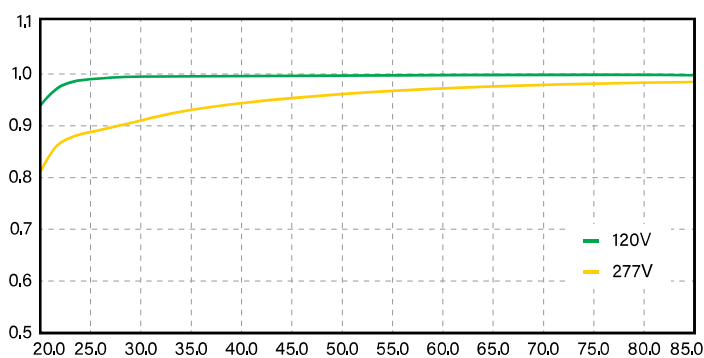
EFFICIENCY (120V)



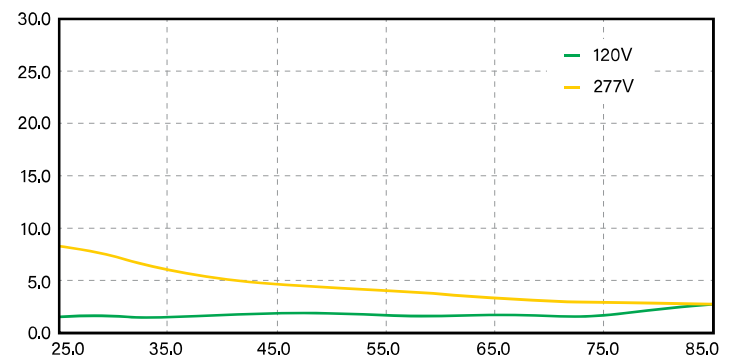
EFFICIENCY (277V)



POWER FACTOR vs OUTPUT POWER



THD vs OUTPUT POWER





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ORDERING INFORMATION

ORDER CODE	PACKAGING STYLE	PACK QUANTITY	ITEM STATUS	UPC	EASY CODE
KTLD-85-UV-P2300-55-VDIM-LT2	Carton Pack	35	Quick Ship	843654108810	RUA-27
KTLD-85-UV-P2300-55-VDIM-CR-LT2	Carton Pack	35	Quick Ship	843654159065	LXC-02

CATALOG NUMBER BREAKDOWN

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

- | | | | | | | | | | | | | |
|---|------------------------------|-------------------------|-----------------------|------------------------------|------------------------------|------------------------|--|---------------------|--------|----|-----|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | | |
| 1 Keystone Technologies LED Driver | 2 Max. 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 | | | | |
| | | | | | | | <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px;"></td> <td>No Aux</td> </tr> <tr> <td>CR</td> <td>Aux</td> </tr> </table> | | No Aux | CR | Aux | |
| | No Aux | | | | | | | | | | | |
| CR | Aux | | | | | | | | | | | |