


**SMART CURRENT
FLEX**

KTLD-40-UV-P1400-55-VDIM-XX-CT1

CONSTANT CURRENT PROGRAMMABLE LED DRIVER

DESCRIPTION

LED Driver | 40W | 120-277V Input | 140-1400mA Programmable Output Current

Class P **10 YEAR LIMITED WARRANTY**

TOTAL POWER: 40W	OUTPUT CURRENT: 140-1400mA
INPUT VOLTAGE: 120-277Vac $\pm 10\%$	DIMMING: 0-10V
INPUT FREQUENCY: 50/60 Hz	WARRANTY: 10 Year Limited



PRODUCT FEATURES

- Compact 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
- UL Damp Rated

PROGRAMMING FEATURES

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

- Output Current Set Range: 140-1400mA
- Minimum Output Current: 1.0 mA
- 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

PROGRAMMING KIT
USB Programmer
KTLD-P-PGMR-1



Programming Cable
KTLD-P-USB-RJ9

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 40-100% Load (Vin @ 277Vac)
Inrush Current	$20.8 A_{peak} i^2t = 0.080 A^2s$ @ 120V, $44 A_{peak} i^2t = 0.350 A^2s$ @ 277V
Max. Input Current	<0.48A (Vin @ 120 Vac), <0.21A (Vin @ 277 Vac)
THD	<20% at 40-100% Load, Vin @ 120-277Vac
Load Regulation	$\pm 3.5\%$
Line Regulation	$\pm 1\%$
Output Tolerance	$\pm 5\%$ at Full Load Condition
Turn-On Delay Time	<0.5 seconds, 140-1400mA, Cold Start
Overshoot	<10% at Full Load Condition
No Load Power Consumption	<1.5W
Ripple and Noise (pk-pk)	<10%
Withstand Voltage	Input to output, 2,800Vdc, 2mA
Leakage Current	<0.75mA, Vin @ 277VAC, 60Hz
Protection	• Over Voltage Protection: Hiccup mode. Protection will trigger when load voltage exceed specified output voltage and will auto recover after the fault mode is removed. • Over Current Protection: Hiccup mode. Protection will trigger when load current exceed 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 overheat and auto-recovery when cooled down.
Surge Rating	2.5kV, 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
40W	140-1400mA	8-55V	60V	88%	90%	51 ft.	✓	✓

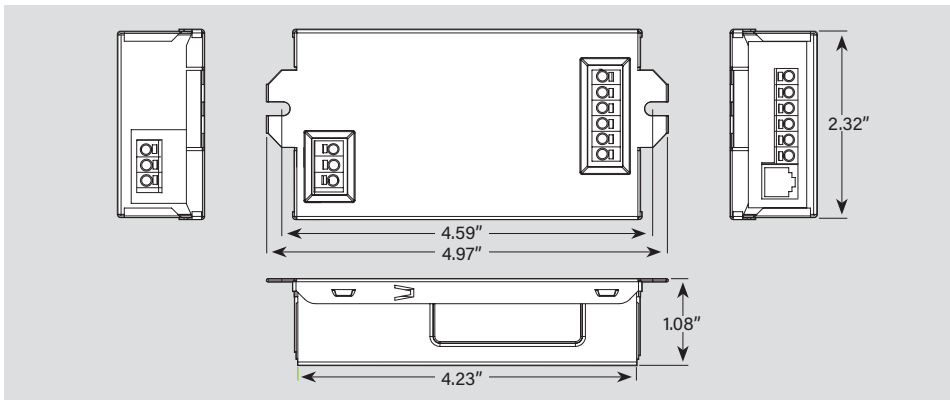
OPTIONAL AUX POWER SPECIFICATIONS

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

WIRING SPECIFICATIONS

INPUT	Terminal Block, Recommend Use with 18AWG Wiring
OUTPUT	Terminal Block, Recommend Use with 18-20AWG Wiring
DIMMING	Terminal Block, Recommend Use with 18-20AWG Wiring

PHYSICAL SPECIFICATIONS



Wiring Diagram

KTLD-40-UV-P1400-55-VDIM-CT1 (without AUX)

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

KTLD-40-UV-P1400-55-VDIM-CR-CT1 (with AUX)

Black: Line		Black: LED (-) LED load, negative
White: Neutral		Red: LED (+) LED load, positive
Green: Ground		Pink: DIM (-) Dimming, negative
		Purple: DIM (+) Dimming, positive
		Brown: AUX (-) AUX, negative
		Orange: AUX (+) AUX, positive

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-30°C/-22°F to 50°C/122°F
Storage Temperature	-40°C/-40°F to 85°C/185°F
Humidity	10% to 90% RH
MTBF	>200,000 Hours, Full Load at 25°C/77°F Ambient Temperature
Life Rating	>50,000 Hours, Full Load at 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

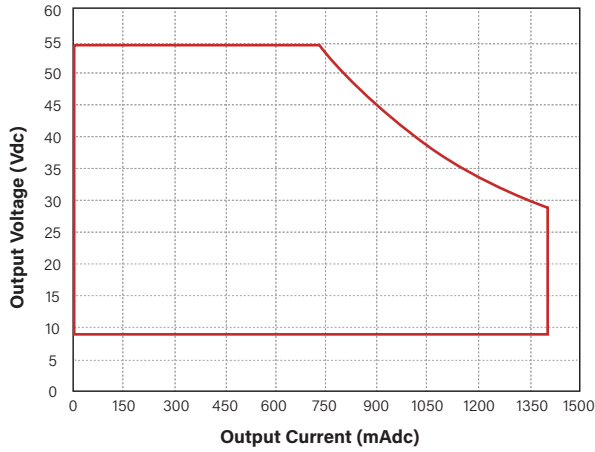
UL/cUL	UL 8750 Class P CAN/CSA-C22.2 No. 250.13
CE	EN61347-1, EN61347-2-13
FCC, 47CFR Part 15	ANSI C63.4:2009 Class B (consumer limit)
EN61000-3-2	Harmonic Current Emissions Class C



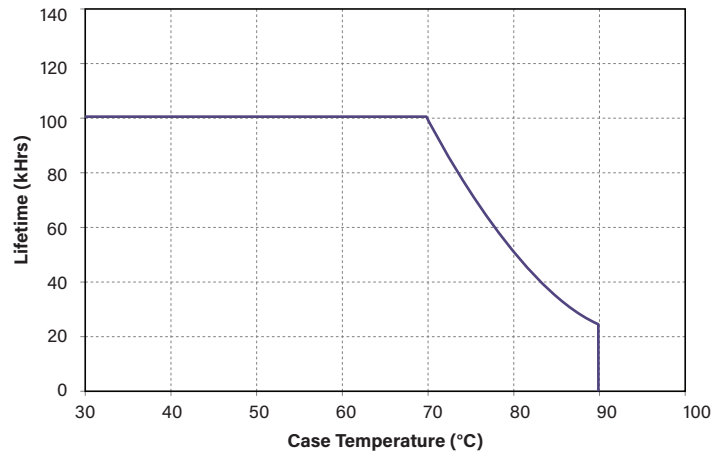
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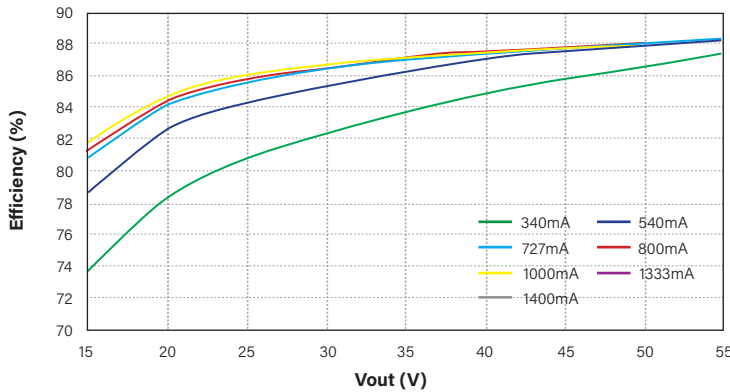
LED DRIVER OUTPUT WINDOW



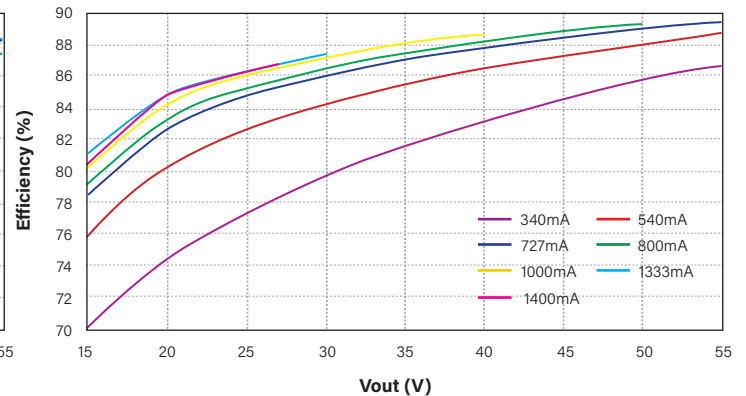
LIFETIME VS CASE TEMPERATURE



EFFICIENCY (120V)



EFFICIENCY (277V)



ORDERING INFORMATION

Order Code	Packaging Style	Pack Quantity	Item Status	UPC	EASY CODE
KTLD-40-UV-P1400-55-VDIM-CT1	Carton Pack	54	Quick Ship	843654166247	KXM-52
KTLD-40-UV-P1400-55-VDIM-CR-CT1	Carton Pack	54	Quick Ship	843654166278	XJG-69

CATALOG NUMBER BREAKDOWN

KTLD-40-UV-P1400-55-VDIM-XX-CT1

1

2

3

4

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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

8 Aux

	No Aux
CR	Aux