SINCE 1945 KEYSTONE | SMART CURRENT FLEX

KTLD-55-UV-P2000-55-VDIM-XX-CT1

CONSTANT CURRENT PROGRAMMABLE LED DRIVER

Class P | c UL us LISTED | RoHS Compliant | FC | TRUSTED Nb3 WARRANTY | 10 YEAR LIMITED WARRANTY

DESCRIPTION

LED Driver | 55W | 120-277V Input | 200-2000mA Programmable Output Current

TOTAL POWER: 55W	**OUTPUT CURRENT:** 200-2000mA
INPUT VOLTAGE: 120-277Vac ±10%	**DIMMING:** 0-10V
INPUT FREQUENCY: 50/60 Hz	**WARRANTY:** 10 Year Limited

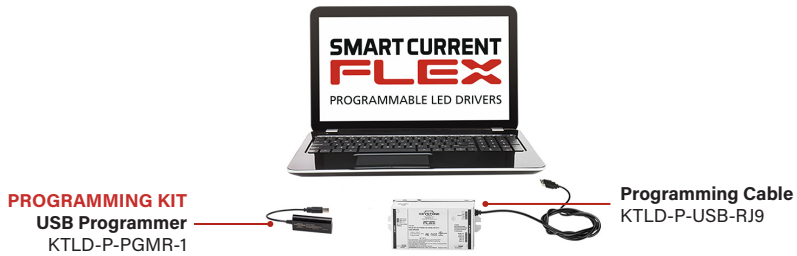
PRODUCT FEATURES

- 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

PROGRAMMING FEATURES

- Output Current Set Range: 200-2000mA
- 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

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



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 40–100% Load (Vin @ 277Vac)
Inrush Current	28.4 A_{peak}, i^2t = 0.102 A^2s @ 120V, 57.6 A_{peak}, i^2t = 0.425 A^2s @ 277V
Max. Input Current	<0.6A (Vin @ 120 Vac), <0.28A (Vin @ 277 Vac)
THD	<20% at 40–100% Load, Vin @ 120–277Vac
Load Regulation	± 3.5%
Line Regulation	± 1%
Output Tolerance	± 5% at Full Load Condition
Turn-On Delay Time	<0.5 seconds, 200-2000mA, 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	2.5 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
55W	200-2000mA	10–55V	60V	89% @ 1000mA, 55V	90% @ 1000mA, 55V	38 ft.	✓	✓

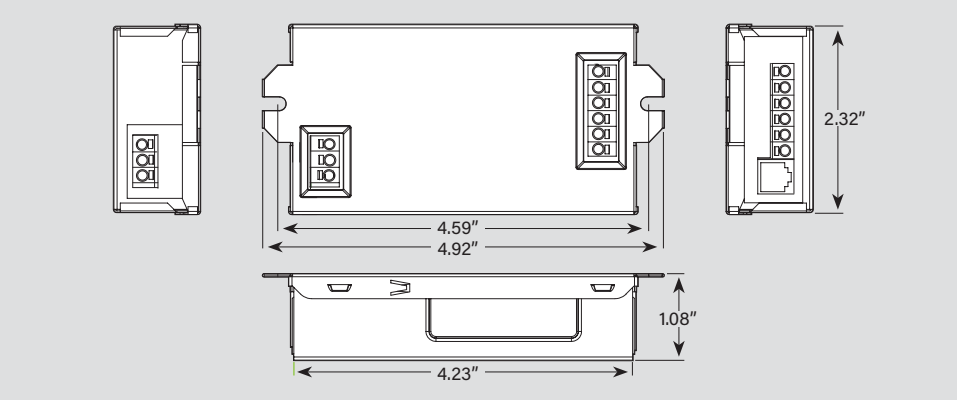
OPTIONAL AUX POWER SPECIFICATIONS

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

WIRING SPECIFICATIONS

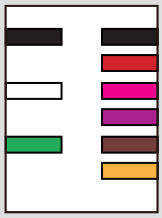
INPUT	Terminal Block, Recommend Use with 18AWG Wiring
OUTPUT	Terminal Block, Recommend Use with 18-20AWG Wiring
DIMMING	Terminal Block, Recommend Use with 18-20AWG Wiring

PHYSICAL SPECIFICATIONS



Wiring Diagram

KTLD-55-UV-P2000-55-VDIM-CT1 (without AUX)



Black: Line
White: Neutral
Green: Ground

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

KTLD-55-UV-P2000-55-VDIM-CR-CT1 (with AUX)

Black: Line
White: Neutral
Green: Ground

Black: LED (-) LED load, negative
Red: LED (+) LED load, positive
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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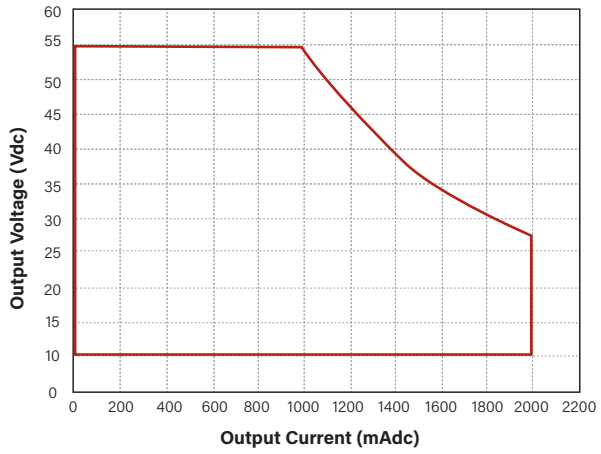
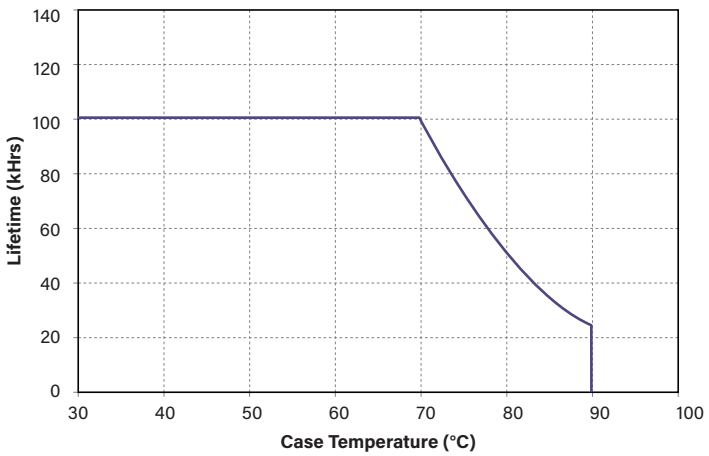
CONSTANT CURRENT PROGRAMMABLE LED DRIVER

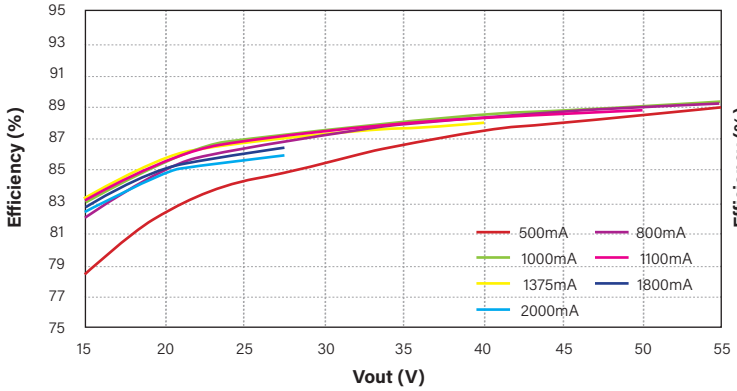
LED DRIVER OUTPUT WINDOW



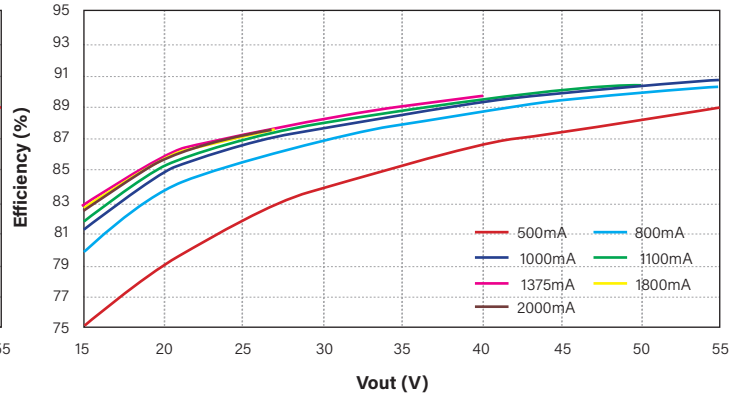
LIFETIME VS CASE TEMPERATURE



EFFICIENCY (120V)



EFFICIENCY (277V)



ORDERING INFORMATION

Order Code	Packaging Style	Pack Quantity	Item Status	UPC	EASY CODE
KTLD-55-UV-P2000-55-VDIM-CT1	Carton Pack	54	Quick Ship	843654166254	IYD-11
KTLD-55-UV-P2000-55-VDIM-CR-CT1	Carton Pack	54	Quick Ship	843654166285	EDF-29

CATALOG NUMBER BREAKDOWN

KTLD-55-UV-P2000-55-VDIM-XX-CT1

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

8 Aux

	No Aux
CR	Aux