



KTLD-24-UV-XXV-AK1

CONSTANT VOLTAGE LED DRIVER

DESCRIPTION

LED Driver | 24W | 120~277V Input | 12V or 24V Output



10 YEAR
LIMITED WARRANTY

TOTAL POWER: 24W	SAFETY COMPLIANCE: UL 8750 and UL879
INPUT VOLTAGE: 120~277Vac $\pm 10\%$	LOCATION TYPE: IP20 design for dry and damp location
INPUT FREQUENCY: 50/60 Hz	OUTPUT VOLTAGE: 12V or 24V
NUMBER OF OUTPUTS: One	WARRANTY: 5 Years

ELECTRICAL SPECIFICATIONS

Input Voltage Range	120~277Vac $\pm 10\%$
Frequency	50/60 Hz
Power Factor	> 0.9 under 120~277Vac input with 80~100% Load Condition (for all output voltage)
Inrush Current	7A @230V
Max. Input Current	0.27A @120V, 0.15A @240V and 0.13A @277V
THD	< 20% under 120~277Vac input with 80~100% Load Condition (for all output voltage)
Load Regulation	$\pm 2\%$
Line Regulation	$\pm 1\%$
Voltage Tolerance	$\pm 5\%$ at full load condition
Turn-On Delay Time	< 0.5s at full load condition
Overshoot	< 10% at full load condition
No Load Power Consumption	< 1.5W
Ripple and Noise (pk-pk)	< 9%
Withstand Voltage	Input to output, 2,800Vdc, 2mA
Leakage Current	Maximum 0.5mA at 277Vac, 60Hz input
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 circuited and will auto recover after the fault mod is removed.

PRODUCT SPECIFICATIONS

Catalog Number	Max. Output Power	Output Current	Output Voltage	OCV	Typical Efficiency at 120V	Typical Efficiency at 240V	Typical Efficiency at 277V	Remote Mounting Distance (#18 AWG)	Class 2	
									US	Canada
KTLD-24-UV-12V-AK1	24W	0-2A	12V	16V	81%	82%	81%	19 ft	✓	✓
KTLD-24-UV-24V-AK1	24W	0-1A	24V	20V	85%	84%	84%	38 ft	✓	✓

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C/-40°F to 60°C/140°F
Storage Temperature	-40°C/-40°F to 85°C/185°F
Humidity	5% to 95%
MTBF	376,000 hours at 40°C/104°F ambient (~70°C/~158°C case temp)
Life Rating	> 50,000 hours at Full Load, 75C / 167 F Case Temperature
Maximum Case Temperature	90°C/194°F
Maximum Case Temperature (tc) for 5-Year Warranty	75°C/167°F

SAFETY AND EMC COMPLIANCE

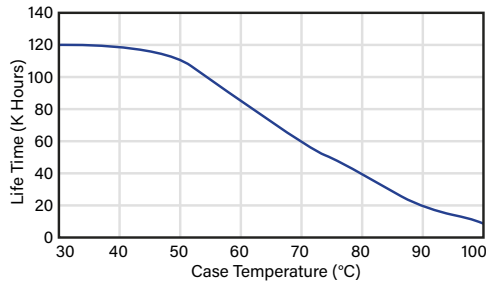
UL/cUL	UL 8750, UL879
CE	EN61347-1, EN61347-2-13
FCC, 47CFR Part 15	ANSI C63.4:2009 Class B (consumer limit)
EN61000-3-2	Harmonic Current Emissions Class C



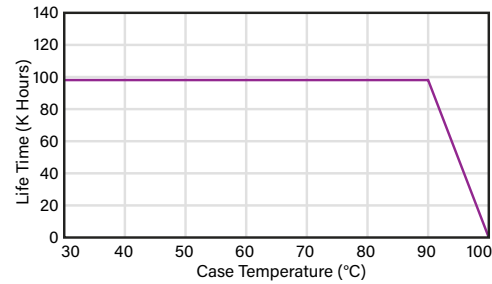
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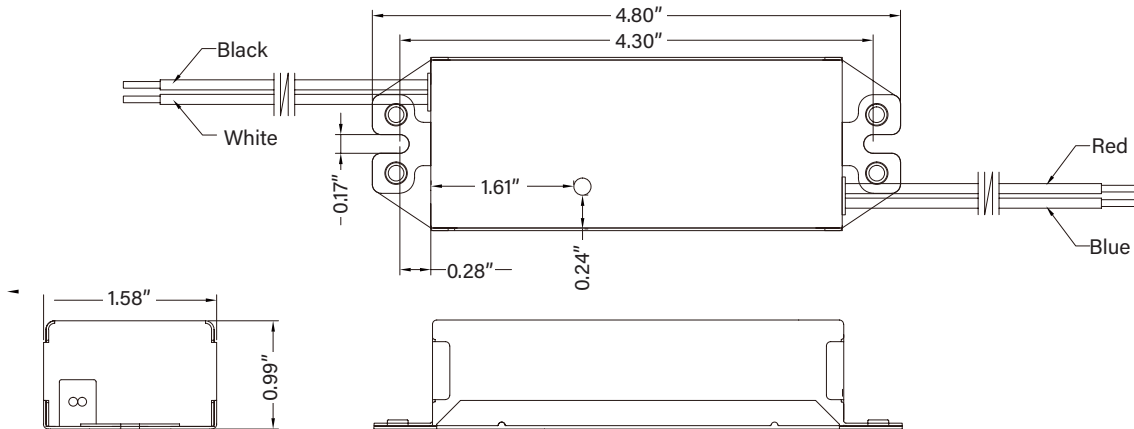
LIFETIME vs CASE TEMPERATURE



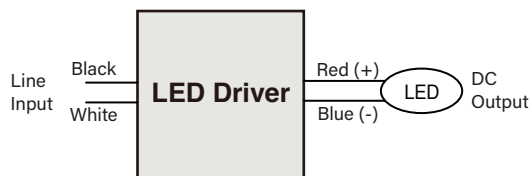
POWER DERATING vs CASE TEMPERATURE



PHYSICAL SPECIFICATIONS



WIRING DIAGRAM



WIRING SPECIFICATIONS

INPUT	12", UL 1316 #18AWG (Black and White)
OUTPUT	12", UL 1316 #18AWG (Red and Blue)

ORDERING INFORMATION

ORDER CODE	PACKAGING STYLE	PACK QTY.	ITEM STATUS
KTLD-24-UV-XXV-AK1	Carton Pack	60	Quick Ship

CATALOG NUMBER BREAKDOWN

KTLD-24-UV-XXV-AK1

1

2

3

4

5

1 Keystone Technologies LED Driver

4 Output Voltage

2 Max. Output Wattage

5 Case Style

3 120~277V Input