



KTLD-10-1N-XXV-F3

CONSTANT VOLTAGE LED DRIVER



DESCRIPTION

LED Driver | 10W | 120V Input | 12-24V Output

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

ELECTRICAL SPECIFICATIONS

Input Voltage Range	120Vac $\pm 10\%$
Frequency	50/60 Hz
Power Factor	> 0.5 under 120Vac input with 80~100% load condition (for all output voltages)
Inrush Current	7A @120V
Max. Input Current	0.19A @120V
THD	< 200% under 120Vac input with 80~100% load condition (for all output voltages)
Load Regulation	$\pm 2\%$
Line Regulation	$\pm 1\%$
Voltage Tolerance	$\pm 5\%$ at full load condition
Turn-On Delay Time	< 0.75s at full load condition
Overshoot	< 10% at full load condition
No Load Power Consumption	< 1W
Ripple and Noise (pk-pk)	< 10%
Withstand Voltage	Input to output, 2,800Vdc, 2mA
Leakage Current	Maximum 0.5mA at 120Vac, 60Hz input
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 circuited and will auto recover after the fault mode is removed.

PRODUCT SPECIFICATIONS

Catalog Number	Max. Output Power	Output Current	Output Voltage	OCV	Typical Efficiency at 120V	Remote Mounting Distance (#18 AWG)	Class 2	
							US	Canada
KTLD-10-1N-12V-F3	10W	0-0.83A	12V	16V	81%	46 ft	✓	✓
KTLD-10-1N-24V-F3	10W	0-0.42A	24V	28V	83%	91 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	583,000 hours at 40°C/104°F ambient (~70°C/~158°C case temp)
Life Rating	80,000 hours at 120Vac input, 100% load and 60°C/140°F case temperature
Maximum Case Temperature	90°C/194°F

SAFETY AND EMC COMPLIANCE

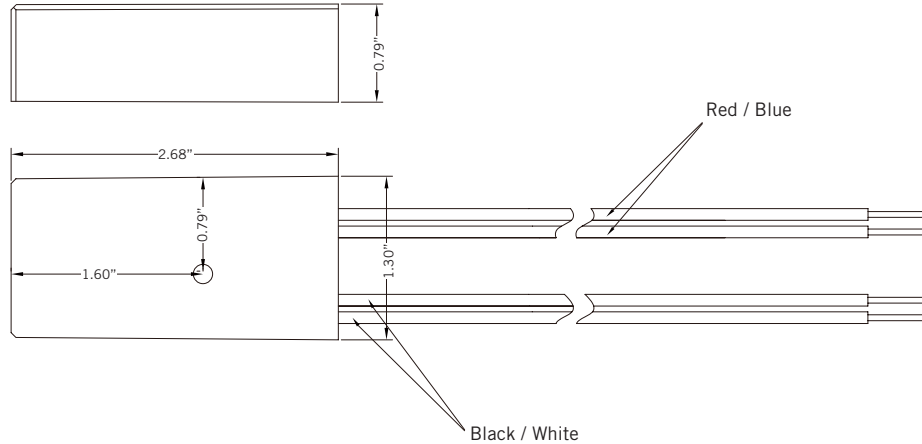
UL/cUL	UL 8750, UL879
CE	EN61347-1, EN61347-2-13
FCC, 47CFR Part 15	ANSI C63.4:2009 Class B (consumer limit)
EN61000-3-2	Harmonic Current Emissions Class C



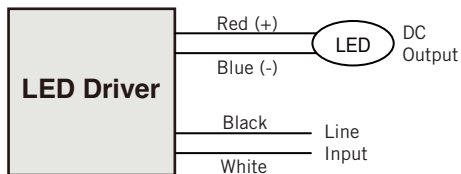
KTLD-10-1N-XXV-F3

CONSTANT VOLTAGE LED DRIVER

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-10-1N-XXV-F3	Carton Pack	100	Quick Ship

CATALOG NUMBER BREAKDOWN

KTLD-10-1N-XXV-F3

1

2

3

4

5

1 Keystone Technologies LED Driver

2 Max. Output Wattage

3 120V Input

4 Output Voltage

5 Case Style



KTLD-60-1-12V

CONSTANT VOLTAGE LED DRIVER



DESCRIPTION

LED Driver | 60W Load | 12V Constant Voltage Output | 120V Input

DRIVER TYPE: Constant Voltage LED Driver
MAX. POWER: 60W
INPUT VOLTAGE: 120Vac $\pm 10\%$
OUTPUT VOLTAGE: 12Vdc
DIMMING: Fixed Output
WARRANTY: 5 Years

PRODUCT FEATURES

- Meets FCC 47 CFR Part 15 (Class B) Consumer Limits
- Over Current and Short Circuit Protection
- Type 1 Outdoor, Suitable for Dry and Damp Locations
- UL 879, UL 8750 Recognized Component LED Power Unit and Signage Application
- Class 2 Output
- 90°C/194°F Maximum Case Temperature
- Input Frequency: 50/60 Hz
- Listed in the Sign Component Manual (SAM)

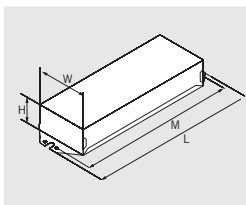
SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Family	INPUT CHARACTERISTICS				OUTPUT CHARACTERISTICS				FEATURES	
	Input Voltage	Input Power	Power Factor	Max. Current	Max. Output Power	Max. Current	Min. Current	Output Voltage	Efficiency	
60W	120Vac	73W	>0.9	0.68A	60W	5A	0A	12Vdc	82%	

PHYSICAL SPECIFICATIONS

CASE DIMENSIONS



LENGTH	9.50"
WIDTH	1.70"
HEIGHT	1.18"
MOUNTING	8.90"
CASE STYLE	L5

STANDARD LEAD LENGTHS*

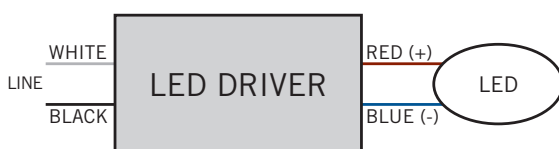
BLACK	12.00"
WHITE	12.00"
BLUE	12.00"
RED	12.00"

Lead wires are 18 AWG 105 C/600V, solid copper.

CASE MATERIAL: Steel

*Consult Keystone for special lead length requirements.

WIRING DIAGRAM



HOT SPOT LOCATION



Actual tc point is noted on each LED driver label.



KTLD-60-1-12V

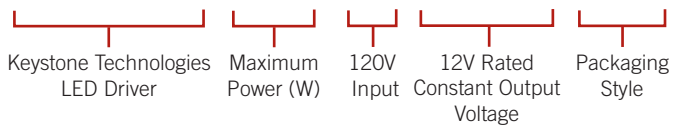
CONSTANT VOLTAGE LED DRIVER

ORDERING INFORMATION

ORDER CODE	PACKAGING STYLE	PACK QTY.	ITEM STATUS
KTLD-60-1-12V-DP	Distributor Pack	10	Quick Ship
KTLD-60-1-12V-CP	Carton Pack	Pending	Active

CATALOG NUMBER BREAKDOWN

KTLD-60-1-12V-DP





KTLD-60-UV-12V

CONSTANT VOLTAGE LED DRIVER



DESCRIPTION

LED Driver | 60W Load | 12V Constant Voltage Output | 120-277V Input

DRIVER TYPE: Constant Voltage LED Driver
MAX. POWER: 60W
INPUT VOLTAGE: 120-277Vac $\pm 10\%$
OUTPUT VOLTAGE: 12Vdc
DIMMING: Fixed Output
WARRANTY: 5 Years



PRODUCT FEATURES

- Meets FCC Part 15 Class B (Consumer Limit) at 120V Input and Class A (Non-Consumer Limit) at 277V Input
- Over Current and Short Circuit Protection
- Type 1 Outdoor, Suitable for Dry and Damp Locations
- UL 879, UL 8750 Recognized Component LED Power Unit and Signage Application
- Class 2 Output
- 90°C/194°F Maximum Case Temperature
- Input Frequency: 50/60 Hz
- Listed in the Sign Component Manual (SAM)

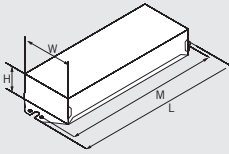
SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Family	INPUT CHARACTERISTICS				OUTPUT CHARACTERISTICS				FEATURES
	Input Voltage	Input Power	Power Factor	Max. Current	Max. Output Power	Max. Current	Min. Current	Output Voltage	Efficiency
60W	120-277Vac	71W	>0.9	0.65A @ 120V 0.29A @ 277V	60W	5A	0A	12Vdc	85%

PHYSICAL SPECIFICATIONS

CASE DIMENSIONS

	LENGTH	9.50"
	WIDTH	1.70"
	HEIGHT	1.18"
	MOUNTING	8.90"
	CASE STYLE	L5

STANDARD LEAD LENGTHS*

BLACK	12.00"
WHITE	12.00"
BLUE	12.00"
RED	12.00"

Lead wires are 18 AWG 105 C/600V, solid copper.

CASE MATERIAL: Steel

*Consult Keystone for special lead length requirements.

WIRING DIAGRAM



HOT SPOT LOCATION



Actual tc point is noted on each LED driver label.



KTLD-60-UV-12V

CONSTANT VOLTAGE LED DRIVER

ORDERING INFORMATION

ORDER CODE	PACKAGING STYLE	PACK QTY.	ITEM STATUS
KTLD-60-UV-12V-DP	Distributor Pack	10	Quick Ship
KTLD-60-UV-12V-CP	Carton Pack	Pending	Active

CATALOG NUMBER BREAKDOWN

KTLD-60-UV-12V-DP

Keystone Technologies LED Driver	Maximum Power (W)	Universal Input (120-277V)	12V Rated Constant Output Voltage	Packaging Style
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