



KTLD-85-UV-SC2600-56-VDIM-U4

CONSTANT CURRENT PROGRAMMABLE LED DRIVER

DESCRIPTION

LED Driver | 50W | 120–277V Input | 860–2600mA Programmable Output Current

| | |
|---------------------------------------|-----------------------------------|
| TOTAL POWER: 85W | OUTPUT CURRENT: 860–2600mA |
| INPUT VOLTAGE: 120–277Vac ±10% | DIMMING: 0–10V |
| INPUT FREQUENCY: 50/60 Hz | WARRANTY: 5 Years |



PRODUCT FEATURES

- Meets FCC Part 15 (Class B) consumer limits
- Short circuit overload and open load protection
- Dimmable with 0–10V dimmer (down to 1% at max. output current)
- Auxiliary Power: 12Vdc; 200mA max.
- THD: <20%
- 20°C/–4°F to 50°C/122°F operating temperature
- 90°C/194°F maximum case temperature
- Input frequency: 50/60 Hz
- Programmable output current via Keystone supplied
- Programming jig

PROGRAMMING FEATURES

- Drive current (10mA increments)
- Minimum dimming level (1%, 3%, 5%, 7%, or 10%)
- Dimming curve (linear, log, inverse log, or square-law)
- Minimum dimming voltage (1V, 1.5V, or 2V)
- Maximum dimming voltage (7V, 8V, or 9V)
- Dim-to-off voltage (0.8V, 1V, 1.2V, or N/A)
- Thermal foldback temperature (75°C/167°F, 80°C/176°F, 85°C/185°F, or 90°C/194°F)

WHAT'S NEEDED?

A SmartCurrent Programmable LED Driver, the SmartCurrent Cradle, and a computer.



ELECTRICAL SPECIFICATIONS

| | |
|----------------------------------|--|
| Input Voltage Range | 120–277Vac ±10% |
| Frequency | 50/60 Hz |
| Power Factor | >0.9 under 120–277Vac Input with 80–100% load condition (for all output currents) |
| Inrush Current | 80A @277V |
| Max. Input Current | 0.89A @120V, 0.44A @240V, and 0.38A @277V |
| THD | <20% under 120–277Vac input with 80–100% load condition (for all output currents) |
| Load Regulation | ± 2% |
| Line Regulation | ± 1% |
| Output Tolerance | ± 5% at full load condition |
| Turn-On Delay Time | <0.75 seconds at full load condition |
| 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 | Maximum 0.5mA at 277Vac, 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 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. |



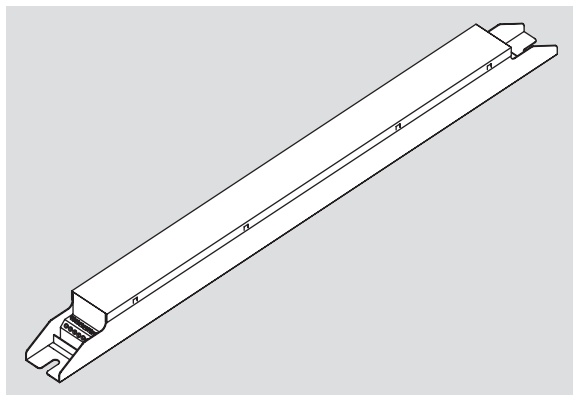
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PRODUCT SPECIFICATIONS

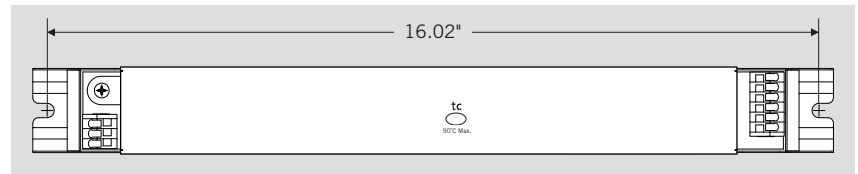
| Max. Output Power | Output Current | Output Voltage | OCV | Typical Efficiency at 120V | Typical Efficiency at 240V | Typical Efficiency at 277V | Remote Mounting Distance (#18 AWG) | Class 2 | |
|-------------------|----------------|----------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|------------------------------------|---------|--------|
| | | | | | | | | US | Canada |
| 85W | 860-2600mA | 10-56V | 60V | 85%@ 2.6A, 33Vdc 87%@ 0.86A, 56Vdc | 87%@ 2.6A, 33Vdc 87%@ 0.86A, 56Vdc | 87%@ 2.6A, 33Vdc 87%@ 0.86A, 56Vdc | 24 ft. | ✓ | |

PHYSICAL SPECIFICATIONS

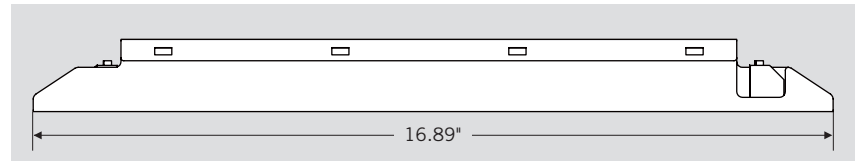


| | | | |
|--------|--------|---------------|--------|
| LENGTH | 16.89" | MOUNTING | 16.02" |
| WIDTH | 1.18" | CASE STYLE | U4 |
| HEIGHT | 1.00" | CASE MATERIAL | Metal |

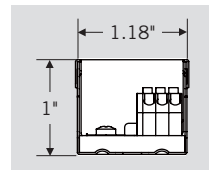
TOP VIEW



FRONT VIEW



SIDE VIEW



WIRING SPECIFICATIONS

| | |
|---------|----------------|
| INPUT | Terminal Block |
| OUTPUT | Terminal Block |
| DIMMING | Terminal Block |

| | | |
|--|--|--|
| <p>Ground</p> <p>Neutral</p> <p>Live</p> | | <p>VO (-): LED load, negative (-)BTIN</p> <p>VO (+): LED load, positive (+)</p> <p>PRG/BTIN: For programming and bluetooth accessories</p> <p>Aux 12Vdc (+): Auxiliary 12Vdc output, positive (+) accessories</p> <p>RTN: Dimming and auxiliary output, negative (-) accessories</p> <p>Dimming (+): Dimming, positive (+)</p> |
|--|--|--|



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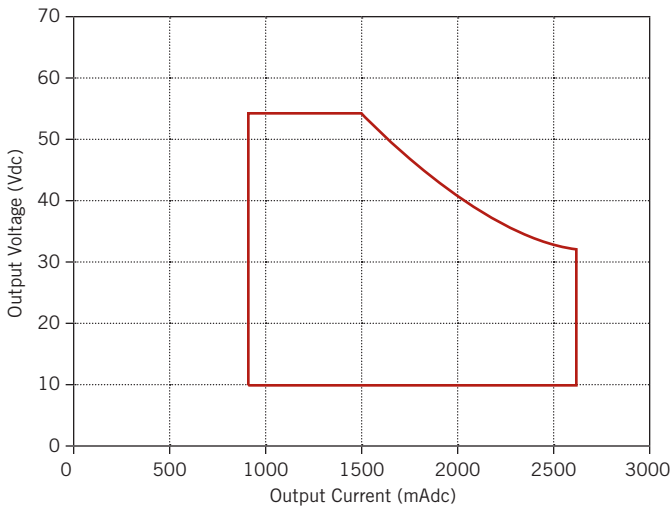
ENVIRONMENTAL SPECIFICATIONS

| | |
|--------------------------|---|
| Operating Temperature | -20°C/-4°F to 50°C/122°F |
| Storage Temperature | -40°C/-40°F to 85°C/185°F |
| Humidity | 5% to 95% |
| MTBF | 209,100 hours at 40°C/104°F ambient (~70°C/~94°F case temperature) |
| Life Rating | 85,000 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, Class P, Type HL |
| 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 |

LED DRIVER OUTPUT WINDOW



Note: driver is in constant power mode from 1500mA to 2600mA.

ORDERING INFORMATION

| ORDER CODE | PACKAGING STYLE | PACK QUANTITY | ITEM STATUS |
|---------------------------------|-----------------|---------------|-------------|
| KTLD-85-UV-SC2600-56-VDIM-U4-CP | Carton Pack | TBD | Quick Ship |

CATALOG NUMBER BREAKDOWN

KTLD-85-UV-SC2600-56-VDIM-U4-CP

1 2 3 4 5 6 7 8 9

- 1 Keystone Technologies LED Driver
- 2 Max. Output Wattage
- 3 120–277V Input
- 4 Smart Current
- 5 Max. Output Current
- 6 Max. Output Voltage
- 7 0–10V Dimming
- 8 Case Style
- 9 Packaging Style