



# KTLD-35-UV-PS650-54-VDIM-LM1

## CONSTANT CURRENT LED DRIVER



### DESCRIPTION

LED Driver | 35W | 120-277V Input | 500, 550, 600 or 650mA Output

|                                               |
|-----------------------------------------------|
| <b>TOTAL POWER:</b> 35W                       |
| <b>INPUT VOLTAGE:</b> 120~277Vac $\pm$ 10%    |
| <b>INPUT FREQUENCY:</b> 50/60 Hz              |
| <b>OUTPUT CURRENT:</b> 500, 550, 600 or 650mA |
| <b>DIMMING:</b> 0-10V                         |
| <b>WARRANTY:</b> 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 Currents)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Inrush Current            | TBD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Max. Input Current        | TBD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| THD                       | < 20% under 120~277Vac input with 80~100% load condition (For All Output Currents)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Load Regulation           | $\pm$ 2%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Line Regulation           | $\pm$ 2%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Output 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 | < 2W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Ripple & Noise (pk-pk)    | < 10%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Withstand Voltage         | Input to output, 2,800Vdc, 2mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Leakage Current           | Maximum 0.5mA at 277Vac, 60Hz input                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Minimum Dim %             | ~10% Dimming                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Protection                | <ul style="list-style-type: none"> <li>• <b>Over Voltage Protection:</b> Hiccup mode. Protection will trigger when load voltage exceeds specified output voltage and will auto recover after the fault mode is removed.</li> <li>• <b>Over Current Protection:</b> Hiccup mode. Protection will trigger when load current exceeds specified output current and will auto recover after the fault mode is removed.</li> <li>• <b>Short Circuit Protection:</b> Hiccup mode. Protection will trigger when short circuited and will auto recover after the fault mode is removed.</li> </ul> |

### PRODUCT SPECIFICATIONS

| Catalog Number               | Output Current | Output Voltage | Output Power | OCV | Typical Efficiency at 120V | Typical Efficiency at 240V | Typical Efficiency at 277V | Remote Mounting Distance (#18 AWG) | Class 2 |        |
|------------------------------|----------------|----------------|--------------|-----|----------------------------|----------------------------|----------------------------|------------------------------------|---------|--------|
|                              |                |                |              |     |                            |                            |                            |                                    | US      | Canada |
| KTLD-35-UV-PS650-54-VDIM-LM1 | 500mA          | 30-54V         | 27.0W        | 60V | 90%                        | 90%                        | 90%                        | 57 ft                              | ✓       |        |
|                              | 550mA          | 30-54V         | 29.7W        |     |                            |                            |                            |                                    |         |        |
|                              | 600mA          | 30-54V         | 32.4W        |     |                            |                            |                            |                                    |         |        |
|                              | 650mA          | 30-54V         | 35.1W        |     |                            |                            |                            |                                    |         |        |

### 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                     | 345,000 hours at 40°C/104°F ambient (~70°C/158°F Case temp)             |
| Life Rating              | 85,000 hours at 120Vac input, 100% load and 60°C/140°F case temperature |
| Maximum Case Temperature | 90°/194°F                                                               |

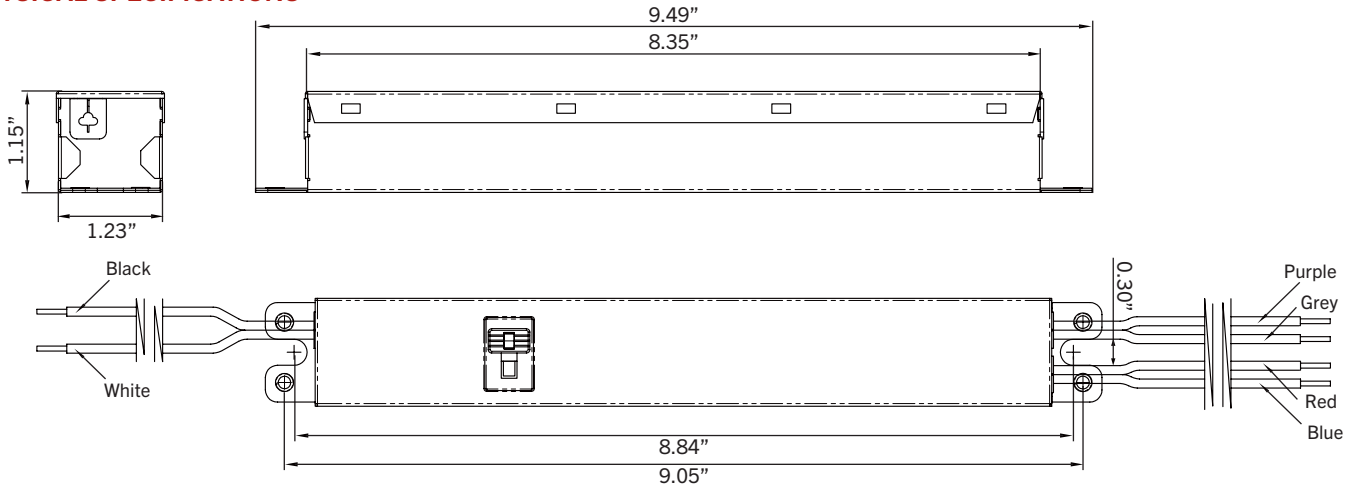
### SAFETY AND EMC COMPLIANCE

|                    |                                             |
|--------------------|---------------------------------------------|
| UL/cUL             | UL 8750, Class P, UL1310 Class 2            |
| 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          |
| Sound Rating       | Class A Sound Rating (per Energy Star V1.0) |

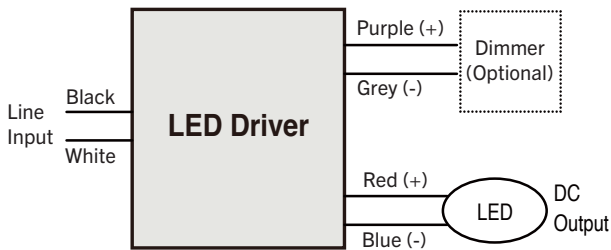
# KTLD-35-UV-PS650-54-VDIM-LM1

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### PHYSICAL SPECIFICATIONS



### WIRING DIAGRAM

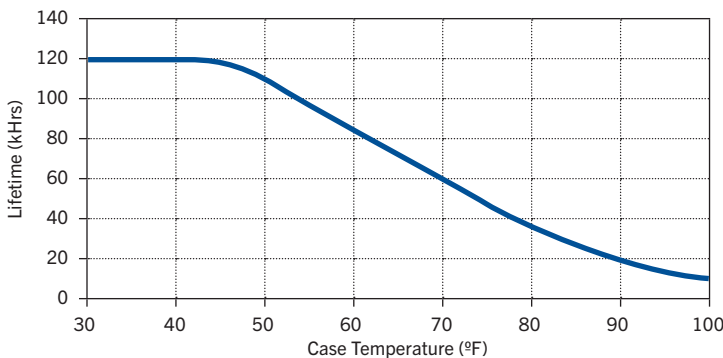


### WIRING SPECIFICATIONS

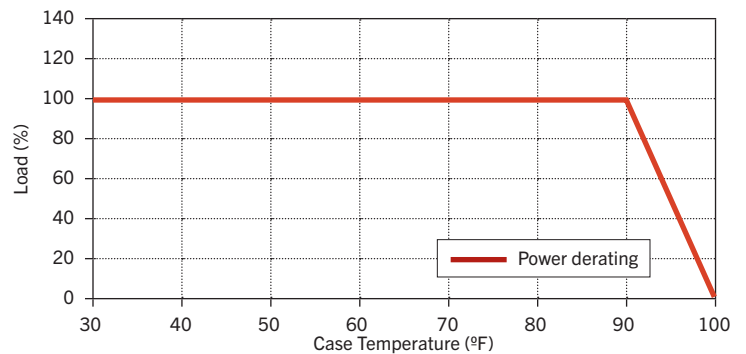
|         |                                            |
|---------|--------------------------------------------|
| INPUT   | 12", UL 1316 #18AWG (Black and White)      |
| OUTPUT  | 12", UL 1316 #18AWG (Red and Blue)         |
| DIMMING | 12", UL 1316/1430 #22AWG (Purple and Grey) |

### PERFORMANCE SPECIFICATIONS

#### LIFETIME VS CASE TEMPERATURE



#### POWER DERATING VS CASE TEMPERATURE

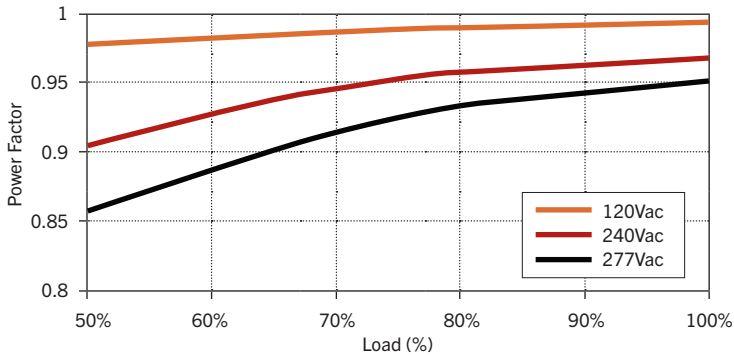




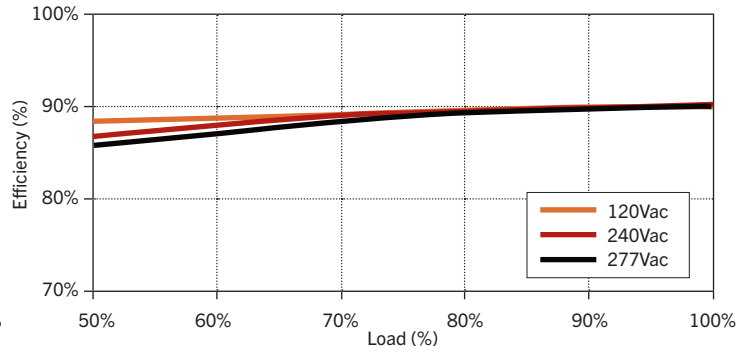
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## CONSTANT CURRENT LED DRIVER

POWER FACTOR VS LOAD



EFFICIENCY VS LOAD



### ORDERING INFORMATION

| ORDER CODE                   | PACKAGING STYLE | PACK QTY. | ITEM STATUS |
|------------------------------|-----------------|-----------|-------------|
| KTLD-35-UV-PS650-54-VDIM-LM1 | Carton Pack     | TBD       | Quick Ship  |

### CATALOG NUMBER BREAKDOWN

# KTLD-35-UV-PS650-54-VDIM-LM1

1 2 3 4 5 6 7 8

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