

# Ultra Slim Constant Voltage Dimmable LED Driver ELV/MLV/TRIAC ELECTRONIC DIM

## CL-UDR-CV-96W-24V-DIM

### Feature

- Output constant voltage
- ETL Listed
- Universal AC input: 120VAC
- High efficiency : up to 85%
- Load: 0-100%
- Protection: short circuit/over loading
- For dry, damp location
- Electronic Dimmable driver
- Dimming range: 5-100%
- Suitable for LED lighting and moving sign applications



**Class 2**



### Technical Specs

#### OUTPUT

|                          |          |
|--------------------------|----------|
| Output RMS Voltage       | 24Vdc    |
| Output RMS Voltage Range | 22-24Vdc |
| Output RMS Current       | 4A Max   |
| Output RMS Power         | 96W      |

#### INPUT

|                            |                         |
|----------------------------|-------------------------|
| Input Voltage Range        | 120Vac                  |
| Input Frequency Range      | 60HZ                    |
| Input Current              | 1.1A@120VAC             |
| Dimmability                | Electronic Low Voltage  |
| Surge Current (cold start) | 20A, 50%, 1.6ms @120Vac |
| Power Efficiency           | 85% @120Vac             |
| PF                         | 0.9                     |

#### PROTECTION

|                          |  |
|--------------------------|--|
| Short-Circuit Protection | Hiccup Mode, and recover automatically |
|--------------------------|--|

#### ENVIRONMENT

|                               |   |
|-------------------------------|---|
| Working Temperature           | -20°C~+45°C                                       |
| Working Humidity              | 10%~90%RH   |
| Approved Enviroments Location | Suitable for Dry, Damp                            |
| Storage Temperature           | -40°C~+80°C                                       |
| Storage Humidity              | 10%~95%RH   |
| Vibration                     | 10~500Hz, 1.0mm, 15 minutes(for X、Y、 Z each axis) |
| Tcase                         | +90°C   |

#### SAFETY&EMC

|                              |                         |         |
|------------------------------|-------------------------|---------|
| Safety Standard              | UL8750                  |         |
| Dielectric Strength (Hi-Pot) | I/P-O/P                 | 1.5KVAC |
|                              | I/P-Case                | 1.5KVAC |
| Insulation Resistance        | 100MΩ/500VDC/25°C/70%RH |         |

#### OTHERS

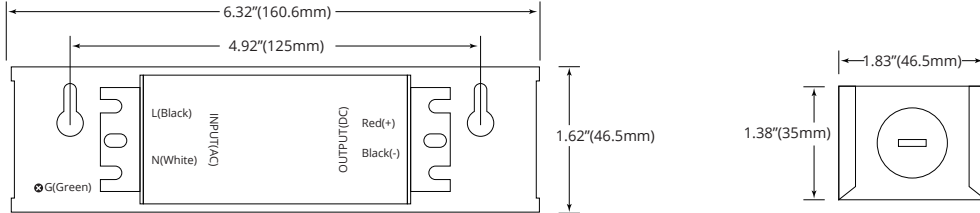
|   |   |
|---|---|
| MTBF  | 50Khrs. MIL-HDBK-217F(25°C)   |
| DIMMER COMPATIBILITY                                | Triac Dimmer LUTRON (PD-5NE, DVELV-300P, MAELV-600, P-PKG1W-WH-R-C) |
| Minimum load available for Dimming (Use DVELV-300P) | 5%  |
| Dimensions  | 160.6*46.5*35mm / 6.32"x1.83x1.38"(L*W*H)                           |
| Weight  | 0.4kg   |
| Outer Box Specifications                            | 350*350*150mm / 13.78"x13.78"x5.9"(L*W*H) / 30pcs/ctn               |
|   | Total 5 layer, each layer 6 pcs / G.W15kg / N.W11kg(1±10%)          |

#### Remarks:

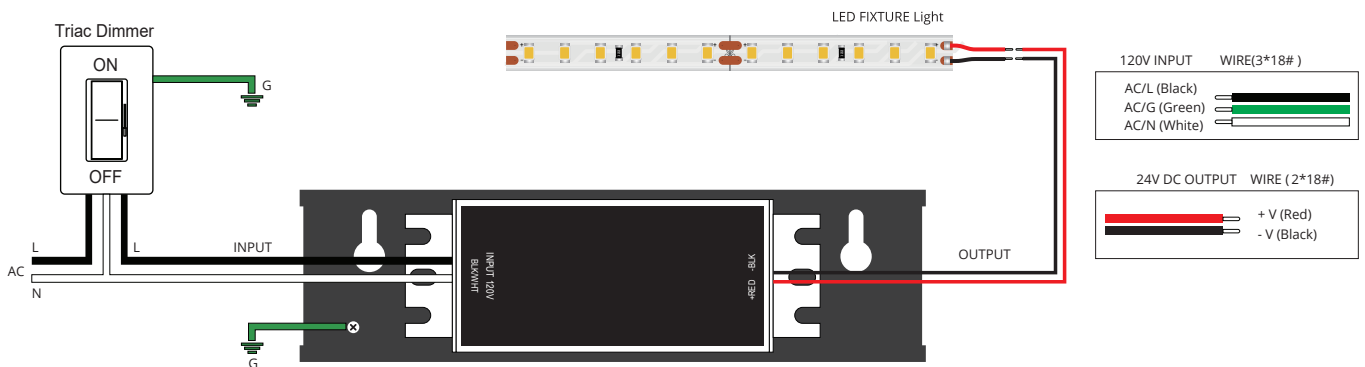
Test environment temperature : 25 ± 2°C;  
 Ripple and noise measurement methods: terminal to parallel 47uF electrolytic capacity and 0.1uF ceramic capacity, in 20 MHZ Bandwidth measurement.  
 \*The driver is suitable for connecting resistor current-limiting LED fixture (e.g. LED strip). The inrush current will be dozens of times increased if connecting built-in constant current IC current-limiting LED fixtures, the driver will activate the overloaded protection (hiccups flickering). "

## Profile Drawing

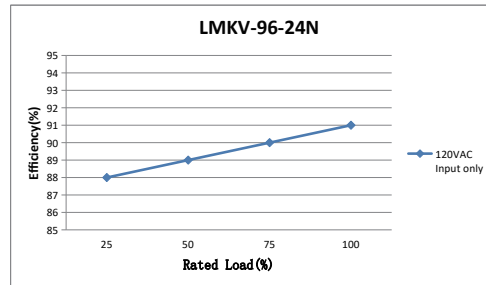
Unit:inch&mm



## Wiring Diagram

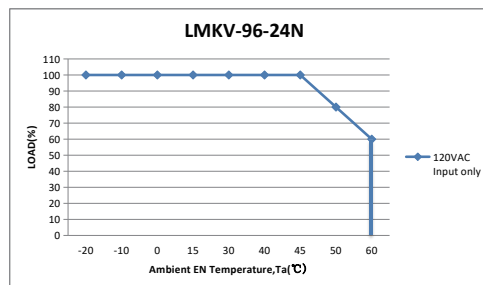


## OUTPUT LOAD vs Efficiency



## OUTPUT LOAD vs Temperature

The LMKV-96-24N series can be operated with cooling air temperatures between -20°C- 45°C by linearly de-rating the total maximum output power (or current) by 2.67%/°C from 45°C to 60°C (see figure ).



## Attentions

- Please ensure that the ground wire is properly grounded and ensure it does not come into contact with the neutral wire.
- Please make the power supply installed in a well-ventilated place, to ensure that the environment temperature is appropriate.
- Do not overload the power supply with multiple appliances.
- Please do not touch the metal shell surface to avoid high temperature scald.
- Do not install in the minefield or high pressure area.
- Do not attempt to repair privately. Please contact the supplier if you have any questions.

## Tips

- To be installed by a certified electrician. Please read and follow the instructions carefully before installing. Ensure all contact points are connected firmly.
- Please pay attention to the using environment, and conduct regular check and maintenance to eliminate safety risks.