



Complete Specification Sheet

ULV96

ULV96

96 Watt
24 Volt
Class 2 Power Supply



Specifications

| | |
|-----------------|------------------------------|
| Category | Power Supplies |
| Series | Universal (3in1) |
| Family | 96W |
| Input Voltage | 100-277V |
| Output Voltage | 24 DC Constant Voltage |
| Max Wattage | 96W |
| Operating Temp. | -13°F (-25°C) - 122°F (50°C) |
| Dimming Options | Triac, MLV, ELV, 0-10V, INC |

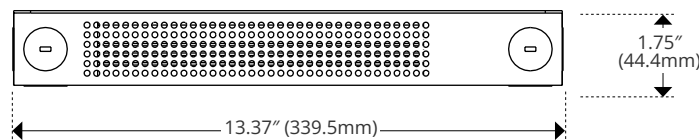
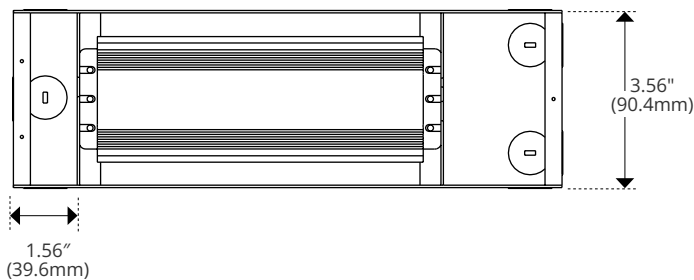
Features

- 431 Hz / Flicker-free Dimming Down to 1%
- Universal Dimming: 0-10V, TRIAC, MLV, ELV, Incandescent
- Unlimited Overload Protection / Auto Reset
- Short Circuit Protection
- Free Air Convection Cooling
- Suitable for Dry / Damp Location
- UL-Listed Class 2

Description

The ULV96 is the most versatile power supply on earth. It accepts 100-277V input voltage, and can dim on all dimming systems (MLV, ELV, INC), plus 0-10V. With sophisticated over-load protection, and a dry/damp enclosure, it is the perfect unit to specify because it works on every system, every time.

Dimensions



Order Code



Kelvix reserves the right to update the product specifications at any time. Field modifications will void Kelvix warranty
 Conforms to UL8750. Certified to CAN/CSA Standard C22.2 NO. 250.13

Fixture Type _____

Project Name _____

Location _____



Product Details

ULV96

SPECIFICATION

| Spec | ULV96 | |
|--|--------------------------|------------------------|
| Input | | |
| Input Voltage | 108 - 305V AC | |
| Input Current | | |
| Rated Input Voltage - Phase Cut Dimming | 120V AC | |
| Rated Input Voltage - No Phase Cut Dimming | 120 - 277V AC | |
| Input Frequency | 47 - 63Hz, 50/60 Typical | |
| Input Current | 120V AC @ 100% Load | 1.0A |
| | 230V AC @ 100% Load | 0.53A |
| | 277V AC @ 100% Load | 0.46A |
| General Characteristics | | |
| Power Factor | 120V AC | 0.95 @ 30% - 100% Load |
| | 230V AC | 0.9 @ 60% - 100% Load |
| | 277V AC | 0.9 @ 70% - 100% Load |
| Total Harmonic Distortion | 120V AC | 20% @ 30% - 100% Load |
| | 230V AC | 20% @ 60% - 100% Load |
| | 277V AC | 20% @ 70% - 100% Load |
| Efficiency - Steady State | 120V AC | 87% |
| | 277V AC | 89% |
| Turn On Delay Time, Cold Start, No Dimmer | 0.5s Typical, 0.75s Max | |
| Output | | |
| Output Voltage | 24V | |
| Output Current | 4A | |
| Output Power | 96W | |
| Voltage Tolerance | | |
| Line Regulation | 1% | |
| Ripple Voltage Full Load, Peak-to-Peak / Average | 3% | |
| Output Voltage Overshoot when Turning Power On | 3% | |
| 0-10V or Resistor Dimming | | |

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| Spec | ULV96 |
|---|---|
| Can be used to dim the output voltage via a standard commercial wall dimmer (0-10VDC), an external control voltage source (0-10VDC), or external resistor. The dimming range is 100% VOUT to 5% VOUT. When DIM is 8-10VDC, the output voltage maintains 100% VOUT, and when DIM is below 0.6V, the output voltage is 5% VOUT. | |
| Absolute Maximum Voltage on 0-10V Pin | -2 - 15V |
| Source Current on 0-10V Dimming Pin | 100uA |
| DIM Voltage for Full Bright | 8V |
| External Resistor Value at Full Bright | 90kΩ |
| Output Duty Cycle 0-10V | 5-100% |
| PWM Dimming | |
| The PWM dimming is a dimming manner that can be used to dim the output voltage via the duty cycle of PWM signal. The dimming range is 100% VOUT to 5% VOUT. When the duty cycle is 80% to 100%, the output voltage reaches 100% VOUT, and the output voltage maintains 5% VOUT when the duty cycle below 6%. | |
| PWM Frequency | 0.1-1KHz |
| High Level Voltage of PWM Signal | 8 - 12V 10V Typical |
| Lower Level Voltage of PWM Signal | 0 - 1V |
| Output Duty Cycle | 5 - 100% |
| Phase Cut Dimming | |
| The unit is compatible with leading-edge and trailing-edge dimmer. | |
| Input Voltage | 120V AC |
| Dim Output Voltage | 0 - 100% |
| Suggest Load Range (PWM) | 9.6W Min, 96W Max |
| Triac Dimming | |
| The unit is compatible with leading-edge and trailing-edge dimmer. | |
| Protection | |
| Over Current Protection | 4.0A-4.2A, 4.1A Typical |
| Over Voltage Protection | Latch off Mode - 36V |
| Over Temperature Protection | If the case temperature exceeds OTP point, the output voltage of the driver is automatically reduced. 194°F (90°C) - 212°F (100°C), 203°F (95°C) Typical |
| Short Circuit Protection | Auto-recovery after fault conditions is removed. |
| Environment | |
| Storage Temperature | -40°F (-40°C) - 185°F (85°C), 5% RH to 95% RH |
| Ambient Operating Temperature | -13°F (-25°C) - 122°F (50°C) |
| Operating Relative Humidity | 10 - 90% Non Condensing |
| Cooling | Convection cooling |
| Environment | Dry/Damp |

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| Spec | ULV96 |
|---------------------------|--|
| Others | |
| Life Time Hours | 50,000 Hours 120V AC Input, 65°C Case Temperature |
| Mean Time Between Failure | 200,000 Hours, Full load, 120V AC Input, 25°C Ambient Temperature |
| Length | 15.75" (400mm) |
| Width | 1.24" (31.5mm) |
| Height | 1.24" (31.5mm) |
| Net Weight | 4.08lbs (1.85Kg) |
| Safety Compliance | |
| Certifications | UL8750 Compliance to UL1310 Class 2, CSA-C22.2 No. 107.1 |
| EMI Emission | FCC 47 CFR Part 15, Subpart B (US) |
| Note: | Unless otherwise specified, all the above parameters are measured at ambient temperature of 25° and IN=100 - 277V AC |

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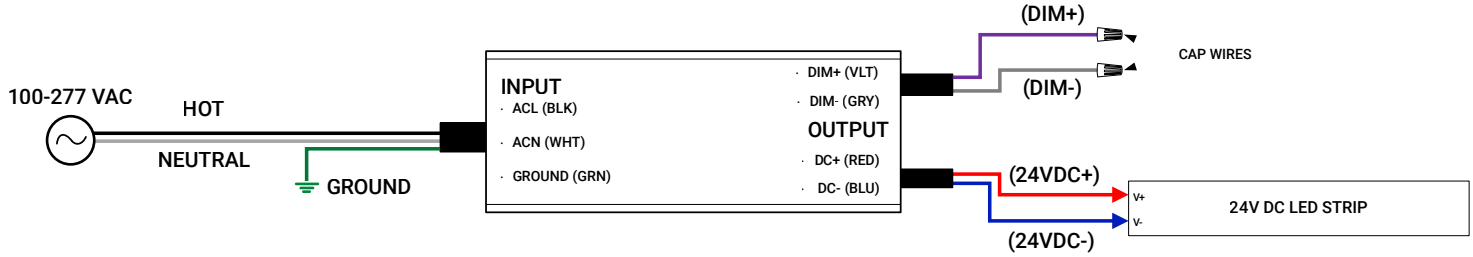
Location _____



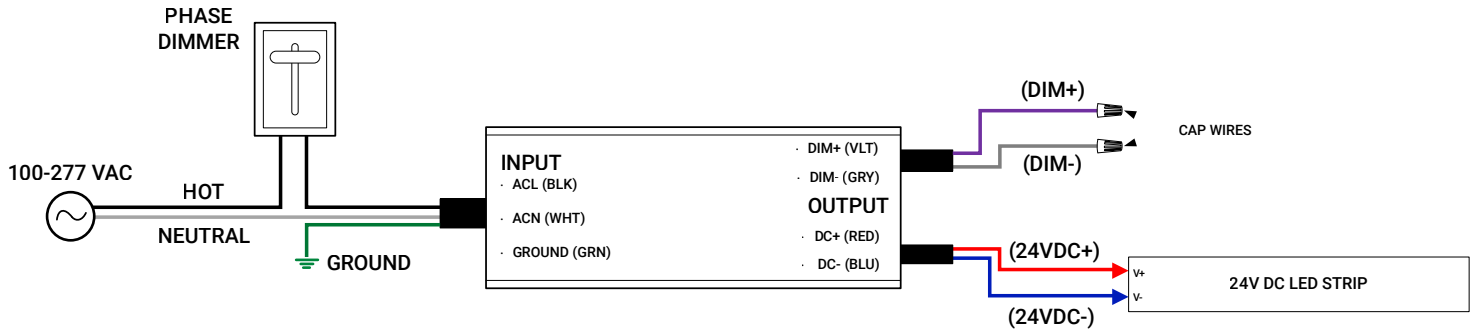
Wiring Diagram

ULV36, ULV96-X, HLV36-X, HLV96-X

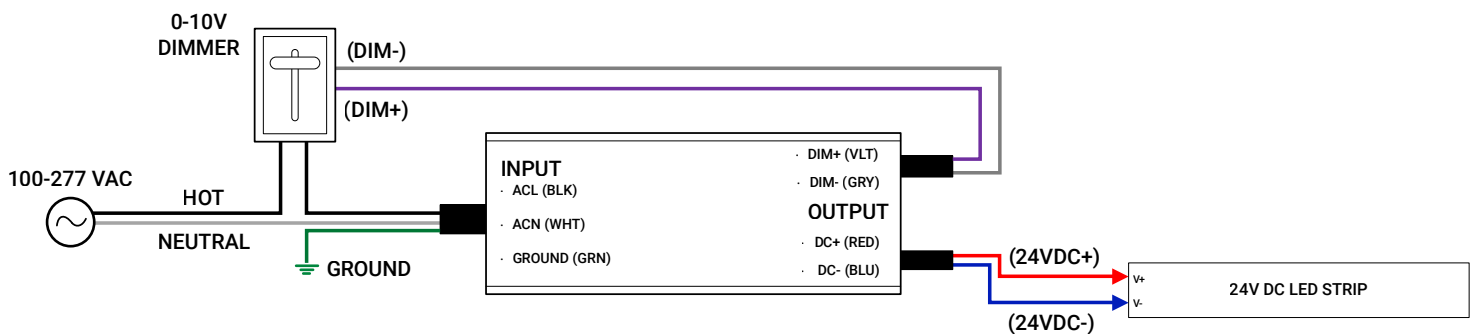
STANDARD APPLICATION (NO DIMMING)



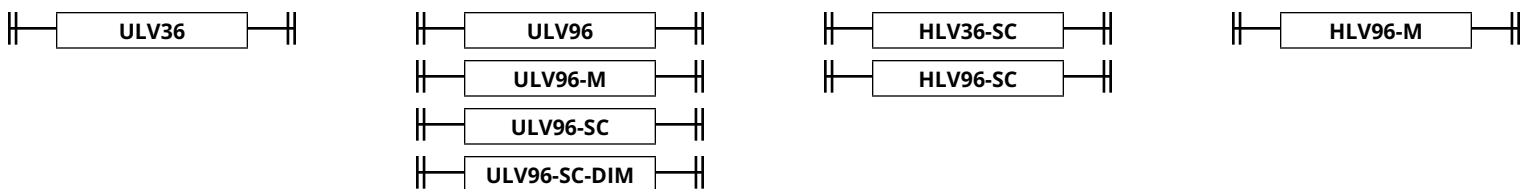
PRIMARY SIDE DIMMING (120V ONLY)



SECONDARY SIDE DIMMING (0-10V)



Compatible with:



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