



# Complete Specification Sheet

## ULV36

# ULV36

36 Watt  
24 Volt  
Class 2 Power Supply



### Specifications

|                        |                              |
|------------------------|------------------------------|
| <b>Category</b>        | Power Supplies               |
| <b>Series</b>          | Universal (3in1)             |
| <b>Family</b>          | 36W                          |
| <b>Input Voltage</b>   | 100-277V AC                  |
| <b>Output Voltage</b>  | 24V DC Constant Voltage      |
| <b>Max Wattage</b>     | 36W                          |
| <b>Operating Temp.</b> | -13°F (-25°C) - 149°F (65°C) |
| <b>Dimming Options</b> | MLV, ELV, 0-10V, Inc         |

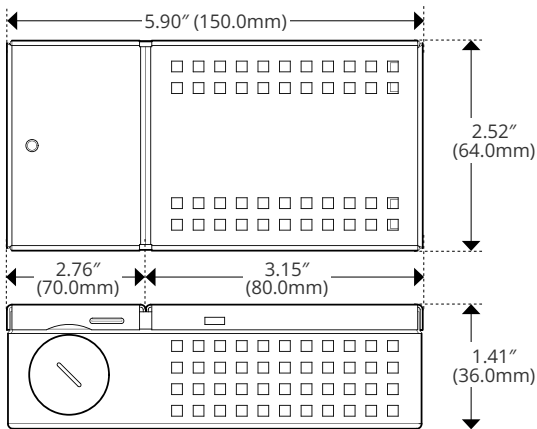
### Features

- 431 Hz / Flicker-free Dimming Down to 5%
- Incandescent, ELV, MLV, or 0-10V Dimming
- Two Independent 0-10V Inputs
- Protections: Short Circuit / Over Current / Over Voltage
- Free Air Convection Cooling
- Suitable for Dry / Damp Location
- UL-Listed Class 2

### Description

Indoor/Damp Mini Class 2 Power Supply with enclosure. 100–277V Input, with 0-10V, ELV, MLV and Incandescent dimming.

### 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

## ULV36

### SPECIFICATION

| Spec   | ULV36                 |                        |
|--|-----------------------|------------------------|
| <b>Input</b>                                     |                       |                        |
| Input Voltage                                    | 108 - 305V AC         |                        |
| Rated Input Voltage - Phase Cut Dimming          | 120V AC               |                        |
| Rated Input Voltage - No Phase Cut Dimming       | 120 - 277V AC         |                        |
| Input Frequency                                  | 47 - 63Hz             |                        |
| Input Current                                    | 120V AC @ 100% Load   | 0.40A                  |
|  | 230V AC @ 100% Load   | 0.20A                  |
|  | 277V AC @ 100% Load   | 0.18A                  |
| Leakage Current (60Hz)                           | 277V AC               | 0.5mA                  |
| <b>General Characteristics</b>                   |                       |                        |
| Power Factor                                     | 120V AC               | 0.95 @ 30% - 100% Load |
|  | 230V AC               | 0.9 @ 50% - 100% Load  |
|  | 277V AC               | 0.9 @ 70% - 100% Load  |
| Total Harmonic Distortion                        | 120V AC               | 20% @ 30% - 100% Load  |
|  | 230V AC               | 20% @ 50% - 100% Load  |
|  | 277V AC               | 20% @ 60% - 100% Load  |
| Efficiency - Steady State                        | 120V AC               | 82-83%                 |
|  | 277V AC               | 82-83.5%               |
|  | 347V AC               | 82-83%                 |
| Turn On Delay Time, Cold Start, No Dimmer        | 0.3s Typical 0.5s Max |                        |
| <b>Output</b>                                    |                       |                        |
| Output Voltage                                   | 24V                   |                        |
| Output Current                                   | 1.5A                  |                        |
| Output Power                                     | 36W                   |                        |
| Voltage Tolerance                                |                       |                        |
| Line Regulation                                  | 1%                    |                        |
| Ripple Voltage Full Load, Peak-to-Peak / Average | 10%                   |                        |
| Output Voltage Overshoot when Turning Power On   | 5%                    |                        |

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### SPECIFICATION

| Spec  | ULV36   |
|---|---|
| <b>0-10V or Resistor Dimming</b>  |   |
| 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   | 0.100mA   |
| DIM Voltage for Full Bright   | 8V  |
| Output Duty Cycle 0-10V   | 5-100%  |
| <b>PWM Dimming</b>  |   |
| 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%  |
| <b>Phase Cut Dimming</b>  |   |
| The unit is compatible with leading-edge and trailing-edge dimmer.  |   |
| Input Voltage   | 120V AC   |
| Dim Output Voltage  | 0 - 100%  |
| Suggest Load Range (PWM)  | 5 - 36W   |
| <b>Protection</b>   |   |
| Over Voltage Protection   | 30V   |
| Over Temperature Protection   | If the case temperature exceeds OTP point, the output voltage of the driver is automatically reduced. |
|   | 212-230°C, 221°C Typical  |
| Short Circuit Protection  | Auto-recovery after fault conditions is removed.  |
| <b>Environment</b>  |   |
| Storage Temperature   | -13°F (-25°C) - 185°F (85°C), 5% RH to 95% RH   |
| Ambient Operating Temperature   | -13°F (-25°C) - 149°F (65°C)  |
| Operating Relative Humidity   | 10 - 90% Non Condensing   |
| Cooling   | Convection cooling  |
| Environment   | Dry/Damp  |

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Fixture Type \_\_\_\_\_  
 Project Name \_\_\_\_\_  
 Location \_\_\_\_\_



# Product Details

## ULV36

### SPECIFICATION

| Spec                      | ULV36  |
|---------------------------|--|
| <b>Others</b>             |  |
| Life Time Hours           | 50,000 Hours 120V AC Input, 70°F Case Temperature  |
| Mean Time Between Failure | 200,000 Hours 120V AC Input, 70°F Case Temperature   |
| Length                    | 5.90" (150mm)  |
| Width                     | 2.52" (64mm)   |
| Height                    | 1.41" (36mm)   |
| Net Weight                | 1.07lbs (0.48Kg)   |
| <b>Safety Compliance</b>  |  |
| 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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Fixture Type \_\_\_\_\_

Project Name \_\_\_\_\_

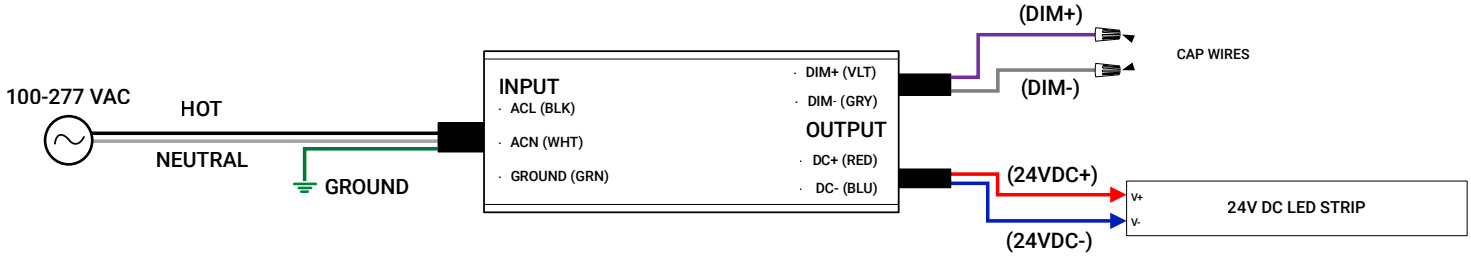
Location \_\_\_\_\_



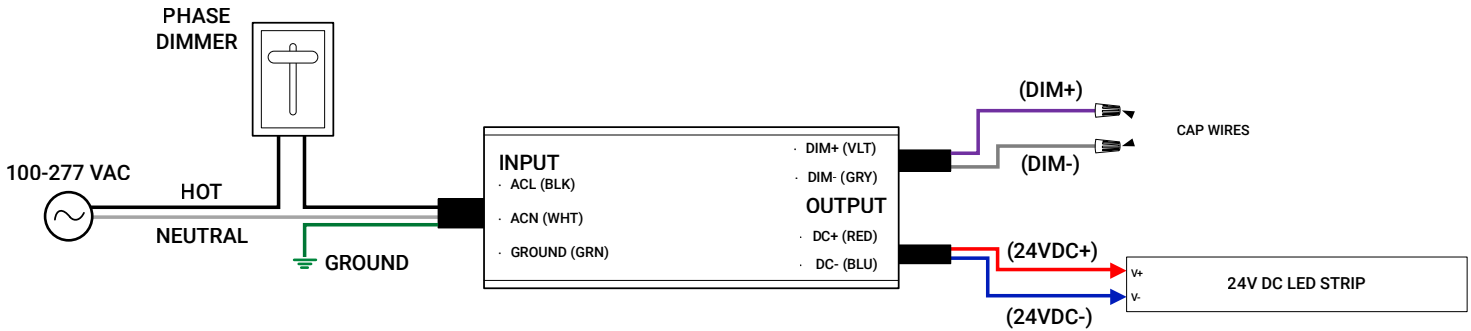
# Wiring Diagram

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

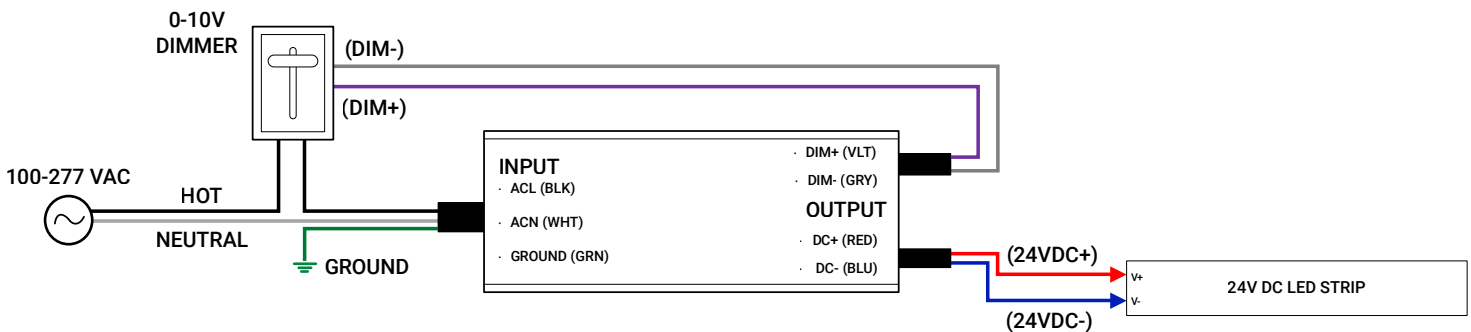
### STANDARD APPLICATION (NO DIMMING)



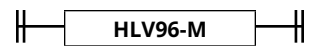
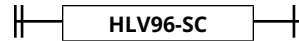
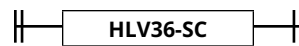
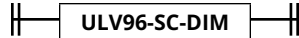
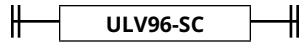
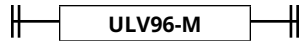
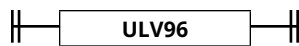
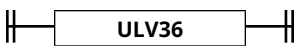
### PRIMARY SIDE DIMMING (120V ONLY)



### SECONDARY SIDE DIMMING (0-10V)



### Compatible with:



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