



Complete Specification Sheet

Mini ULV96

Mini ULV96

96 Watt
24 Volt
Class 2 Power Supply



Specifications

Category	Power Supplies
Series	Universal (3in1)
Family	96W
Input Voltage	120-347V
Output Voltage	24 DC Constant Voltage
Max Wattage	96W
Storage Temp.	-40°F (-40°C) - 185°F (85°C)
Operating Temp.	-31°F (-35°C) to 122°F (50°C)
Dimming Options	Triac, ELV, 0-10V

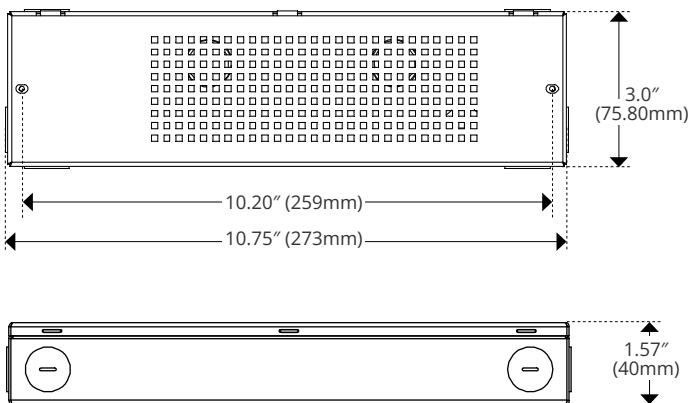
Features

- Universal AC Input Voltage (120-347V)
- Linear Form Factor, Compact Design, Suitable for Field Installation
- Flicker Free, Spec-Grade Smoothness. Title-24 Compliant
- Designed for Indoor Installations, Dry and Damp UL Approved
- Constant Voltage Universal Dimming: ELV, MLV, Triac, or Isolated 0-10V down to 0.1%
- Logarithmic Dimming Curve

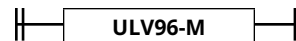
Description

The ULV96-M is a compact linear power supply specifically engineered for efficient lighting control. It allows for universal dimming down to 0.1% with flicker-free performance and is suitable for indoor installations, providing reliable protection in various environments.

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

Mini ULV96

SPECIFICATION

Spec	ULV96-M	
Input		
Input Voltage	108 - 382V AC	
Rated Input Voltage - Phase Cut Dimming	120 - 347V AC	
Input Frequency	47 - 63Hz, 50/60 Typical	
Input Current	120V AC	1.0A @ 100% Load
	277V AC	0.4A @ 100% Load
	347V AC	0.36A @ 100% Load
Inrush Current (Cold Start)	120V AC	30A
	277V AC	65A
	347V AC	82A
Leakage Current (60Hz)	120V AC	0.5mA
	277V AC	0.6mA
	347V AC	0.75mA
General Characteristics		
Power Factor	120V AC	0.9 @ 30% - 100% Load
	277V AC	0.9 @ 50% - 100% Load
	347V AC	0.9 @ 70% - 100% Load
Total Harmonic Distortion	120V AC	20% @ 30% - 100% Load
	277V AC	20% @ 50% - 100% Load
	347V AC	20% @ 65% - 100% Load
Efficiency - Steady State	120V AC	88%
	277V AC	90%
	347V AC	90%
Turn On Delay Time, Cold Start, No Dimmer	0.5s Max	
Output		
Output Voltage	24V	
Output Current	4A	
Output Power	96W	
Voltage Tolerance	3% Max	
Line Regulation	1%	
Ripple Voltage Full Load, Peak-to-Peak / Average	5%	
Output Voltage Overshoot when Turning Power On	10%	

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Spec	ULV96-M
0-10V or Resistor Dimming	
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	0 - 10V
Source Current on 0-10V Dimming Pin	200uA
DIM Voltage for Full Bright	8V
Light On	0.6V
Light Off	0.5V
Triac Dimming	
The unit is compatible with leading-edge and trailing-edge dimmer.	
Input Voltage	120V AC
Dim Output Voltage (PWM)	0 - 100V
Suggest Load Range for 120V AC	10 - 100%
Protection	
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 are removed.
Environment	
Storage Temperature	-40°F (-40°C) - 185°F (85°C), 5% RH to 95% RH
Ambient Operating Temperature	-31°F (-35°C) to 122°F (50°C)
Operating Relative Humidity	10 - 90% Non Condensing
Cooling	Convection cooling
Environment	Dry/Damp

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SPECIFICATION

Spec	ULV96-M
Others	
Life Time Hours	50,000 Hours 176°F (80°C) Case Temperature
Mean Time Between Failure	200,000 Hours 77°F (25°C) Case Temperature
Length	10.75" (273mm)
Width	3.0" (75.80mm)
Height	1.57" (40mm)
Net Weight	1.83lbs (0.83Kg)
Safety Compliance	
Acoustic Noise	24 dBA, Measured from 1m without dimmer
Flicker	IEEE 1789(≥ 1% dimming), Title 24
Certifications	UL8750, CAN/CSA-C22.2 No. 250.13
EMI Emission	FCC 47 CFR Part 15, Class A
>95% dip, 0.5 period; 30% dip, 25 periods; 95% reduction, 250 periods	
±8kV Air Discharge, ±6kV	
±2kV Direct couple to Line input, 5kHz repetition rate, 15mS duration, 300mS period. 7 coupling paths, 1 minute per path (14 total combinations)	
±4kV Common Mode (12 Ω), ±2kV Differential Mode (2 Ω), 5 strikes/1 minute interval (40 total strikes)	
2.5kV Ring Wave, test at 30Ω, 7 strikes/1 minute interval, Common and Differential Mode, 56 total strikes	
Note:	Unless otherwise specified, all the above parameters are measured at ambient temperature of 25° and IN=100 - 277V AC

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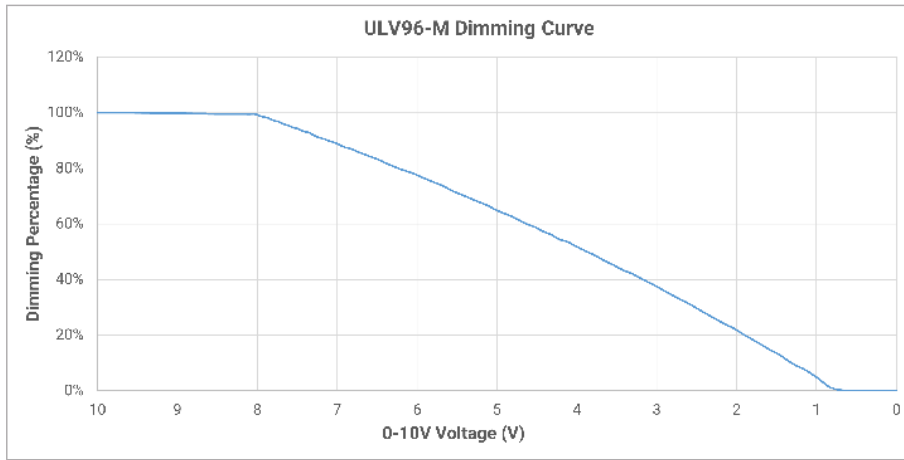


Dimming Chart

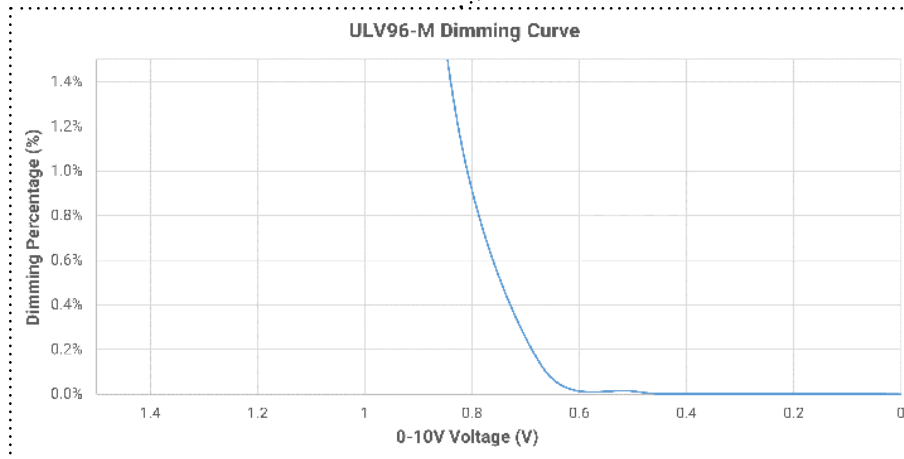
Mini ULV96

Charts

DIMMING CURVE (FULL)



DIMMING CURVE (EXPLODED)



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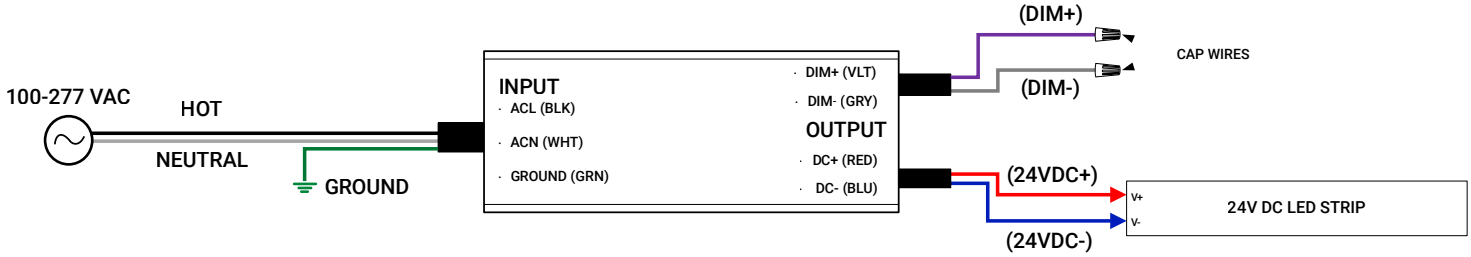
Location _____



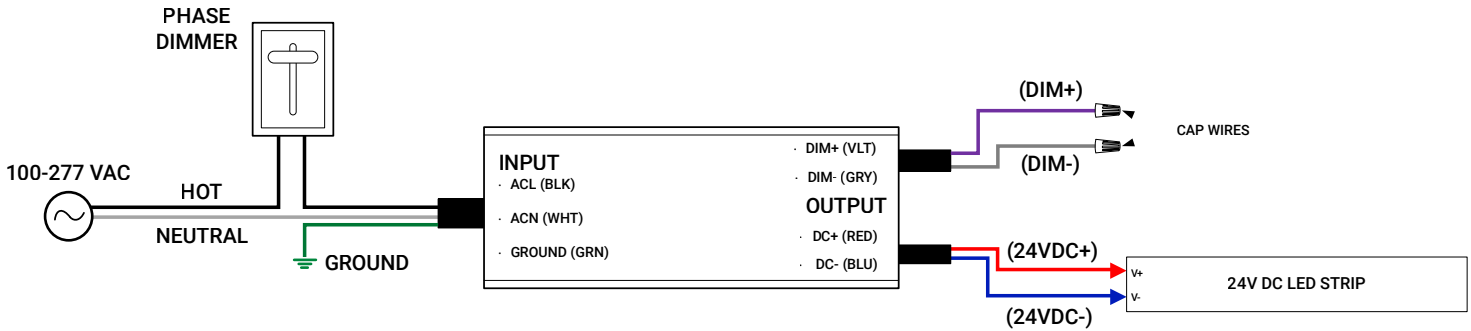
Wiring Diagram

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

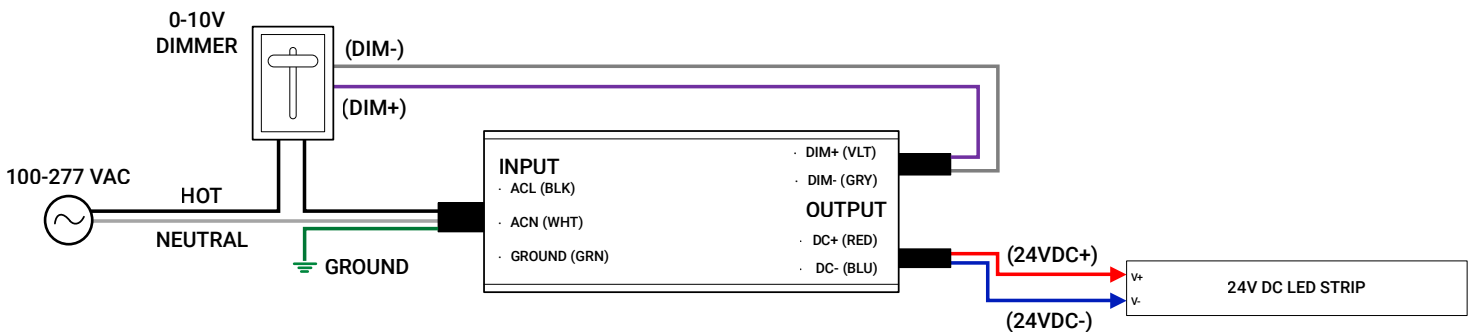
STANDARD APPLICATION (NO DIMMING)



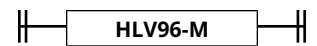
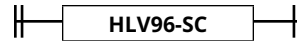
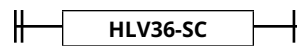
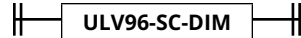
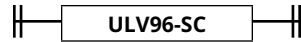
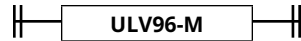
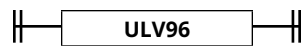
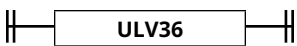
PRIMARY SIDE DIMMING (120V ONLY)



SECONDARY SIDE DIMMING (0-10V)



Compatible with:



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