

FIXTURE TYPE _____

PROJECT NAME _____

LOCATION _____



ULV36

36 WATT-24 VOLT |
CLASS 2 POWER SUPPLY



Description

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

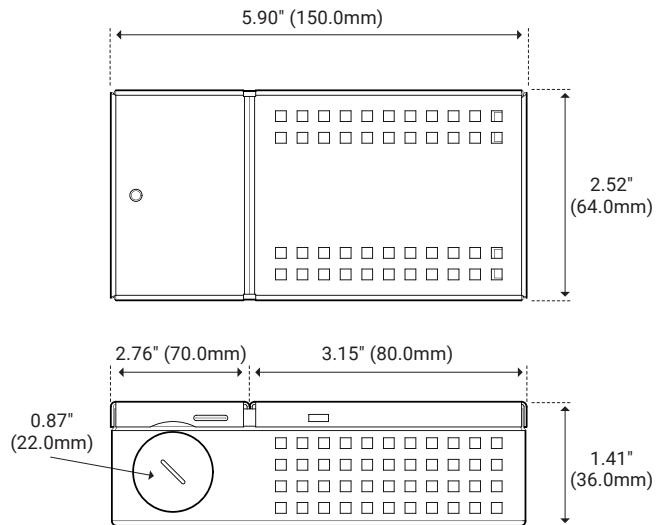
Features

- 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

Specifications

Series	ULV36
Input Voltage	100–277V AC
Output Voltage	24V DC / Constant Voltage
Max Wattage	36W
Temp Range	-20°F(-28°C) – 158°F (70°C)
Dimensions	5.90" × 2.52" × 1.41"
Classification	Class 2

Dimensions



Model List

Model Name	Rated Input Voltage	Rated Output Power	Rated Output Voltage	Output Current
ULV36	120–277 VAC	36 W	24 VDC	0-1500 mA × 2
	120 VAC (Phase Cut Dimming)			



I Specification

Parameters	Symbols	Test Conditions / Comment	Min	Typ	Max	Units
INPUT						
Input Voltage	VIN		108		305	VAC
Rated Input Voltage	VIN RATED	Phase Cut Dimming		120		VAC
		No Phase Cut Dimming	120		277	VAC
Input Frequency	fline		47		63	Hz
Input Current	IIN	Full Load, VIN = 120 VAC			0.40	A
		Full Load, VIN = 230 VAC			0.20	A
		Full Load, VIN = 277 VAC			0.18	A
GENERAL CHARACTERISTICS						
Power Factor	PF	30% – 100% Load, VIN = 120 VAC	0.95			PF
		50% – 100% Load, VIN = 230 VAC	0.9			PF
		70% – 100% Load, VIN = 277 VAC	0.9			PF
Total Harmonic Distortion	THD	30% – 100% Load, VIN = 120 VAC			20	%
		50% – 100% Load, VIN = 230 VAC			20	%
		70% – 100% Load, VIN = 277 VAC			20	%
Efficiency	η	Full Load, VIN = 120 VAC	82	83		%
		Full Load, VIN = 230 VAC	83	83.5		%
		Full Load, VIN = 277 VAC	83	83.5		%
Turn On Delay Time	Ton_delay	Cold Start, No Dimmer		0.3	0.5	S
Leakage Current	ILeakage	VIN = 277 VAC / 60Hz			0.5	mA
OUTPUT						
Output Voltage	VOUT	No Dimming	22.8	24	24.7	V
Output Current	IOUT		0		1500	mA
Line Regulation	IOUT-LINE				1	%
Load Regulation	IOUT-LOAD				1	%
Ripple Voltage	IOUT-RIPPLE	Full Load, (pk-to-pk) / (2 × Average)			10	%
Output Voltage Overshoot		Power ON			5	%
0-10V OR RESISTOR DIMMING						
The 0-10 V or resistor dimming is a dimming manner that can be used to dim the output voltage via a standard commercial wall dimmer (0-10 VDC) or an external control voltage source (0-10 VDC) or external resistor.						
The dimming range is 100 % VOUT to 5 % VOUT. When VDIM is 8-10 VDC, the output voltage maintains 100% VOUT, and when VDIM is below 0.6 V, the output voltage is 5% VOUT.						
Absolute Maximum Voltage on 0-10 V Pin	VDIM		-2		15	V
Source Current on 0-10 V Dimming Pin	IDIM			100		μA
VDIM Voltage for Full Bright	VDIM-MAX		8			V
Output Duty Cycle	D0-10V	PWM Output	5		100	%



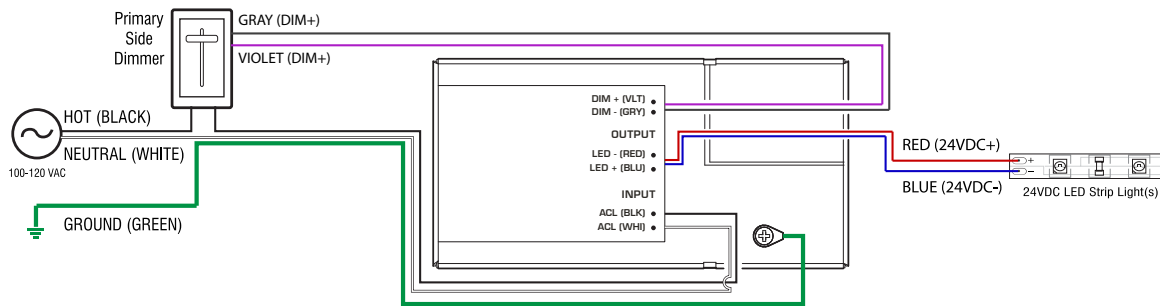
I Specification

Parameters	Symbols	Test Conditions / Comment	Min	Typ	Max	Units
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 % V _{OUT} to 5 % V _{OUT} . When the duty cycle is 80 % to 100 %, the output voltage reaches 100 % V _{OUT} , and the output voltage maintains 5 % V _{OUT} when the duty cycle below 6 %.						
PWM Frequency	f _{PWM}		0.1		1	KHz
High Level Voltage of PWM Signal	VPWM-High		8	10	12	V
Lower Level Voltage of PWM Signal	VPWM-Low		0		1	V
Output Duty Cycle	DPWM	PWM Output	5		100	%
TRIAC DIMMING						
The unit is compatible with leading-edge and trailing-edge dimmer.						
Input Voltage	V _{IN-TRIAC DIM}			120		VAC
Output Duty Cycle	D _{TRIAC}	PWM Output	0	-	100	%
Suggest Load Range	P _{Suggest}	V _{IN} = 120 VAC	5		36	W
PROTECTION						
Over Voltage Protection	VOVP	Latch Off Mode			30	V
Over Temperature Protection	TOTP	If the case temperature exceeds OTP point, the output voltage of the driver is automatically reduced.	100	105	110	∅
Short Circuit Protection		It will recover automatically after fault conditions is removed.				
ENVIRONMENT						
Storage Temperature	T _{Storage}	Humidity: 5 % RH to 95 % RH	-40	-	+85	∅
Operating Relative Humidity	H _a	Non Condensing	10		90	%
OTHERS						
Life Time	T _{Life}	Full Load, 120 VAC Input, 50 ∅ Case Temperature	50			kHrs
MTBF	T _{MTBF}		200			kHrs
Dimension L × W × H	5.906" × 2.52" × 1.417" (150mm × 64mm × 36mm)					
SAFETY COMPLIANCE						
UL Listed	UL8750 Compliance to UL1310 Class 2, CSA-C22.2 No. 107.1					
EMC COMPLIANCE						
FCC Part 15B	Conducted Emission Test and Radiated Emission Test					
Note: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25 ∅ and V _{IN} = 100 – 277 VAC.						

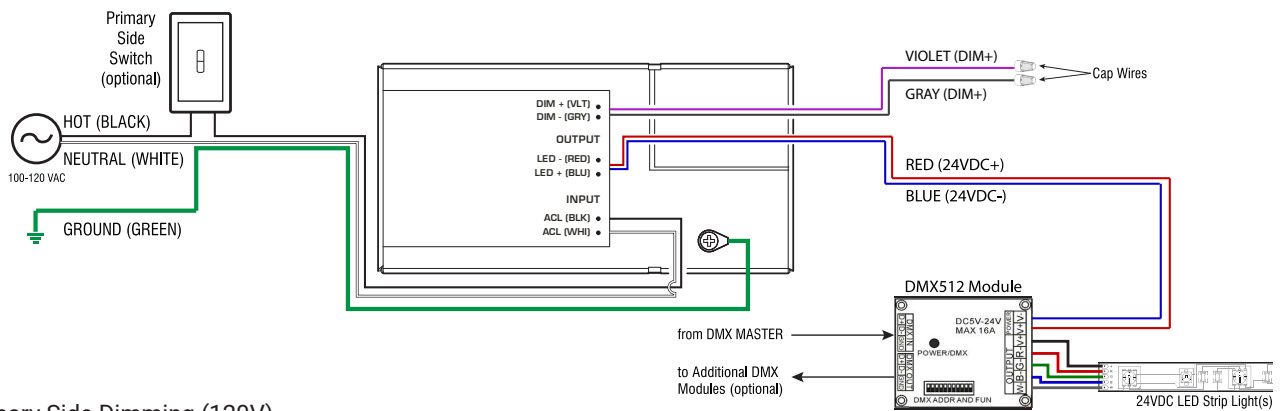


I Typical Application

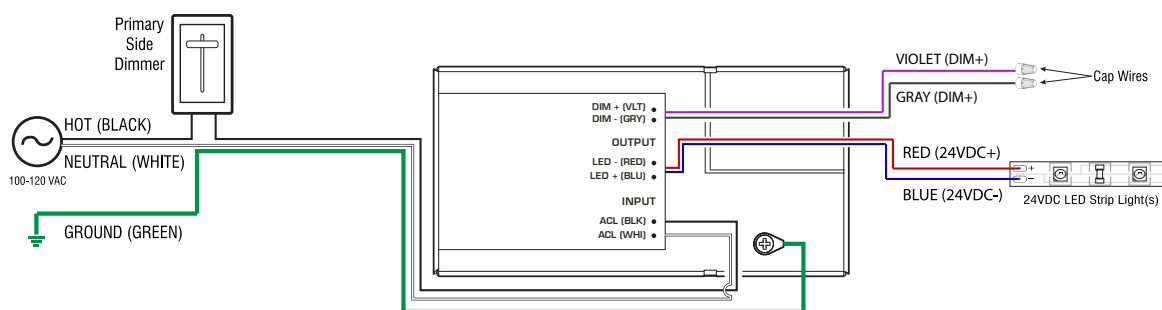
0-10V Dimming (120-277V)



DMX Control (120-277V)



Primary Side Dimming (120V)



Primary Side Dimming (120-277V)

