

■ Features

- Power Rating: 96W
- Input Voltage: 90-305Vac
- Constant current and constant voltage design
- Output current (40mA-2400mA)
- Fixed Current
- Efficiency up to 90%
- Compatible with 0-10V dimming
- UL Class 2 Output
- Lightning, OVP, SCP, OTP & Open Circuit Protection
- IP67
- 7-year warranty
- Surge Protection: L-N 4kV, L/N-Earth 4V



*Product images are for illustrative purposes only and may vary from actual design.

■ Application

- Outdoor LED lights
- Street lights, high bay and low bay lights, LED panels

■ Model List*(See part number scheme for model number details)

Model Number	Input Voltage Range	Output Power	Output Voltage	Output Current Min.	Output Current Max.	Efficiency	Certification
L4WC-096S240ST	90-305Vac	96W	12-24V	240mA	2400mA	90%	UL/cUL
L4WCD096S240ST	90-305Vac	96W	12-24V	240mA	2400mA	90%	UL/cUL
L4WC-096S040ST	90-305Vac	96W	20-40V	40mA	400mA	90%	UL/cUL
L4WCD096S040ST	90-305Vac	96W	20-40V	40mA	400mA	90%	UL/cUL

*(-=No dimming/D=Dimming)

■ Technical Data

Input voltage range	90-305Vac
Frequency	47-63Hz
Power factor	> 0.95 @115Vac & 80~100% Full load, > 0.90 @277Vac & 80~100% Full load
Output voltage	12-24V, 20-40V
Output power	96W
Max. Current ripple	400mA, 240mA
Max. Voltage ripple	±0.5%
Max input current	1.3A
Max input Power	113W

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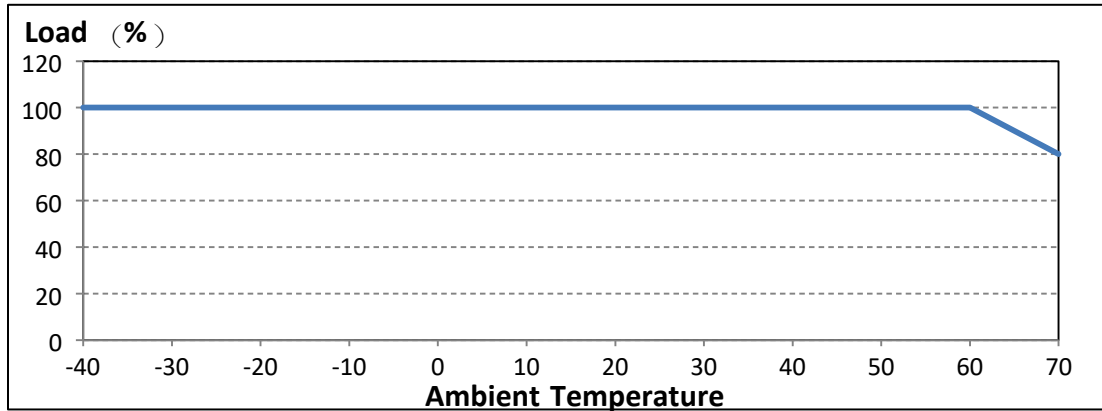
■ Technical Data(cont.)

Efficiency	90%
Max. open circuit voltage	26V,43V
Dimming	D Version: 0-10V Dimming
THD	<20% @ 120Vac & 80~100% full load, <20% @ 277Vac & 80~100% full load
Output Current	400mA-2400mA
Protection	OVP, SCP, OTP, and open circuit protection
Environmental Protection	UL Dry and Damp and Wet, and Type TL
Working Temperature	-40~+70°C
Max Case Temperature	90°C
Surge Protection	Line to line 4kV, Line to Earth 4kV
ANSI Surge Type	1.2/50μs Combination Wave (w/t 2Ω)
Isolation (Primary to Secondary)	3750Vac/10maMax/60 seconds
Dimension	227x49x40.5 mm (8.94x1.93x1.59 inch)
Mounting length	240 mm (9.45 inch)
Overall length	253 mm (9.96 inch)
Weight	0.87 kg (1.91 lb)
Lifetime	>70,00 hours @full load, 75°C Tcase
Packing	0.87 kg; 18 units/carton; 27 cartons/pallet

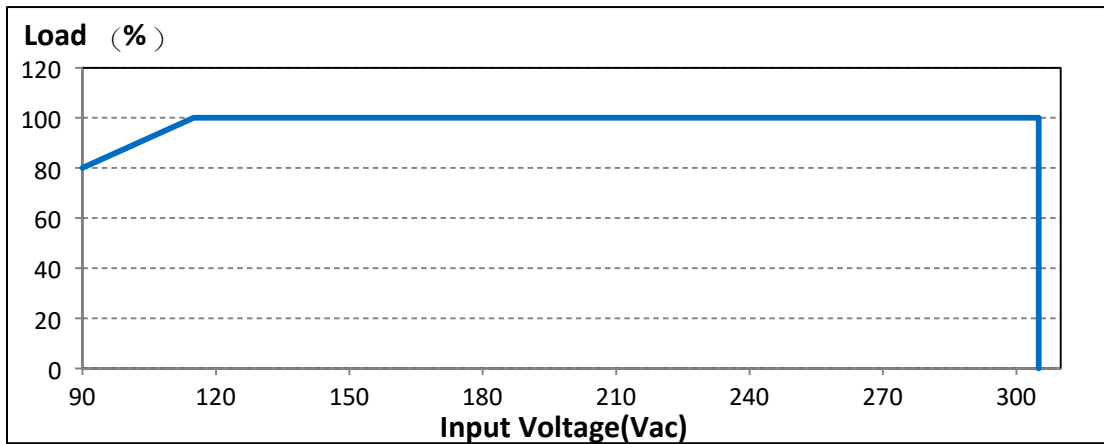
■ Safety Compliance

Safeties	UL1310 Class 2
Electromagnetic Compliance	Per Title 47 CFR Part 15 Class B

■ Derating Curve

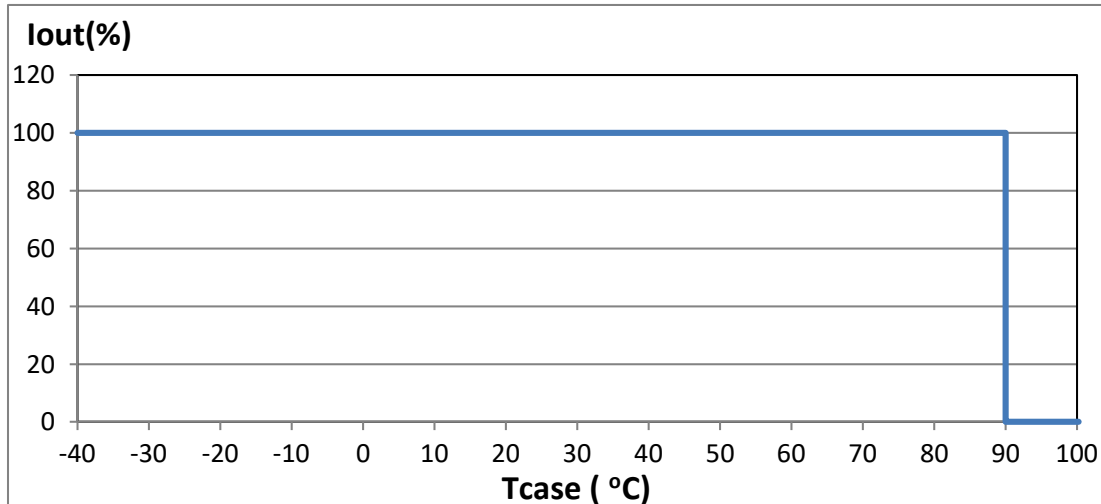


■ Static Characteristics

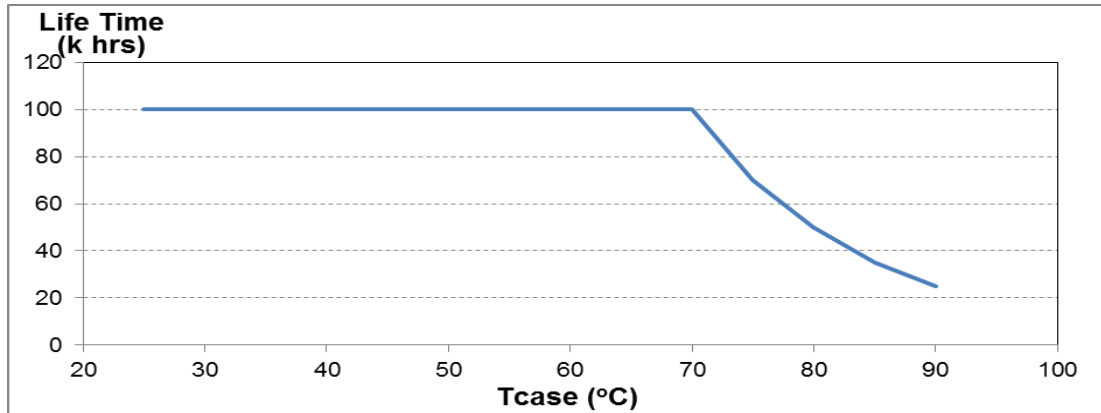


■ Electrical Specifications

Output Current vs. Case Temperature (with $\pm 5^\circ\text{C}$ Tolerance)

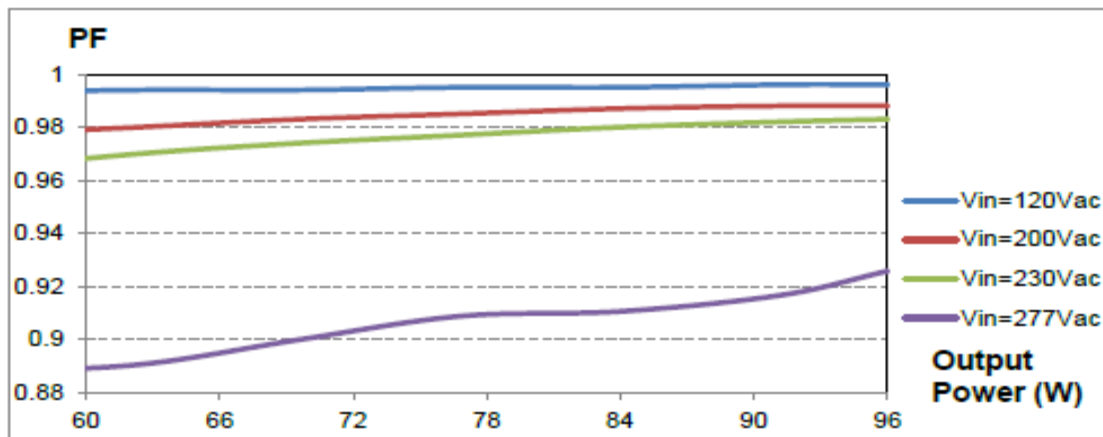


■ Lifetime vs Case Temperature



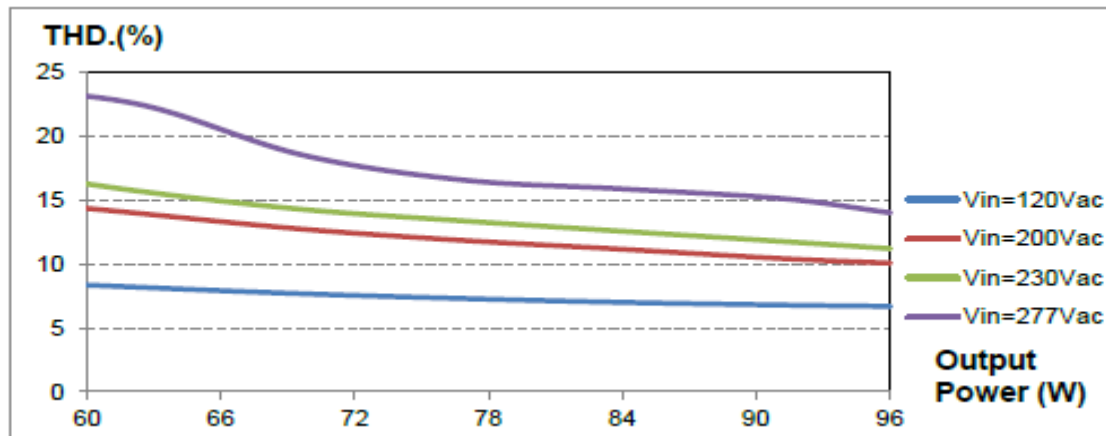
■ Power Factor vs. Output Power

(@ 25°C)

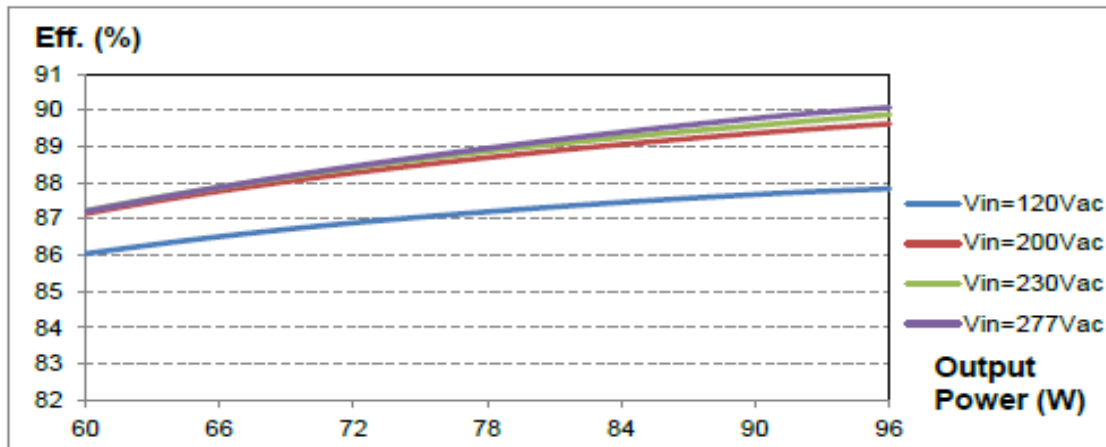


■ THD vs. Output Power

(@ 25°C)

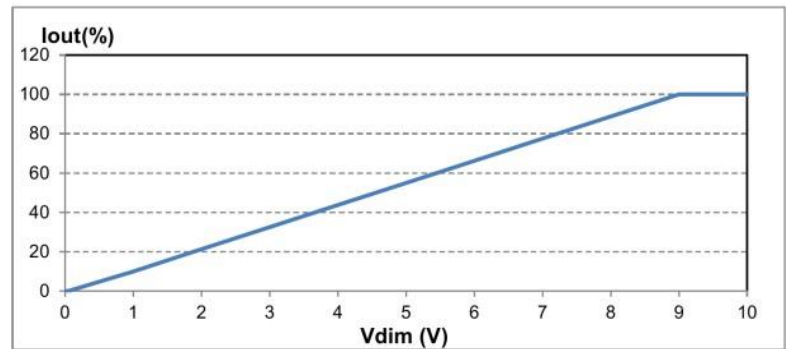
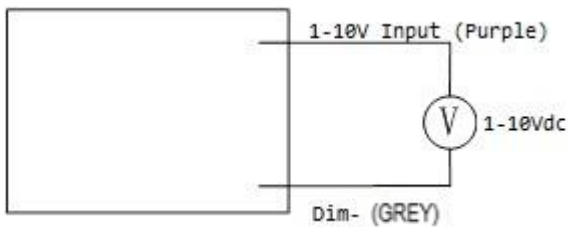


■ Efficiency vs. Output Power

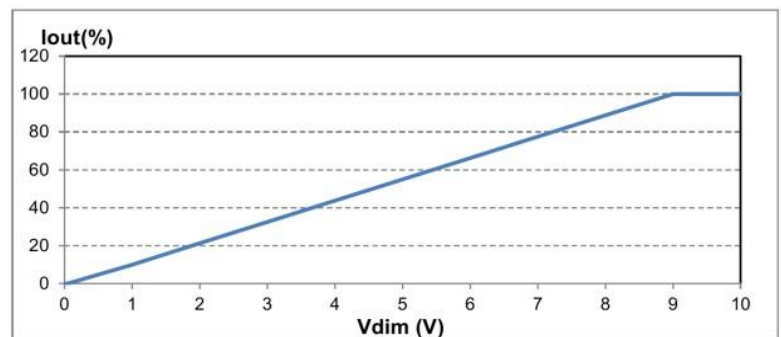
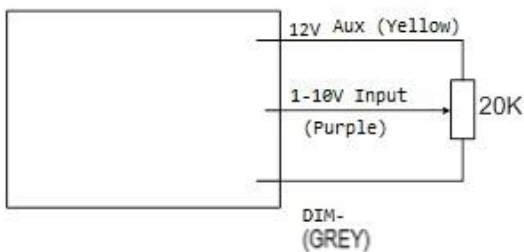


■ Dimming

Mode 1 : 1-10Vdc Input on Dimming Control



Mode 2 : Potentiometer on Dimming Control

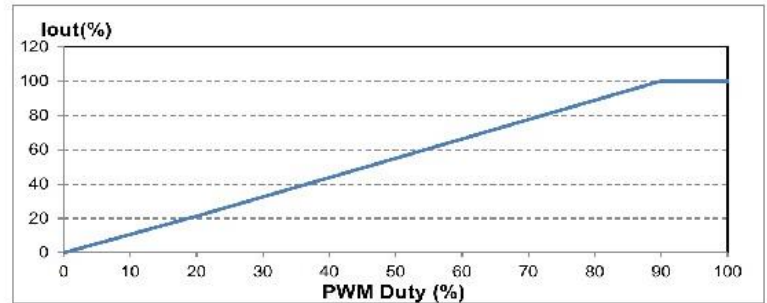


■ **Dimming(cont.)**

Mode 3 : PWM Signal on Dimming Wires

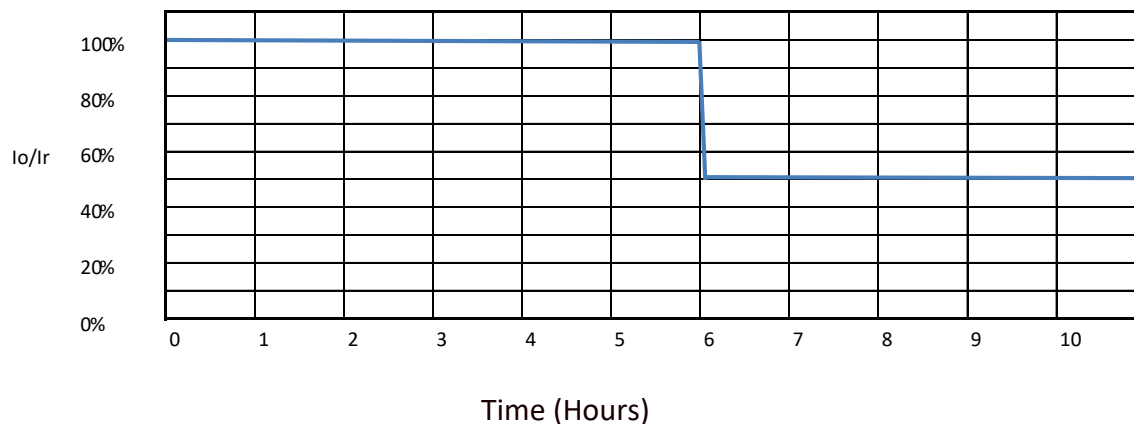


Io/Ir vs PWM Duty



Parameter	Values	Conditions
Input Voltage	0~10 V	Purple wire.
Input Current	10 mA	
PWM Frequency	0.5 ~ 3 kHz	
PWM Pulse Width	10%~100%	

Mode 4 : Timer Dimming (Does not require dimming wires)



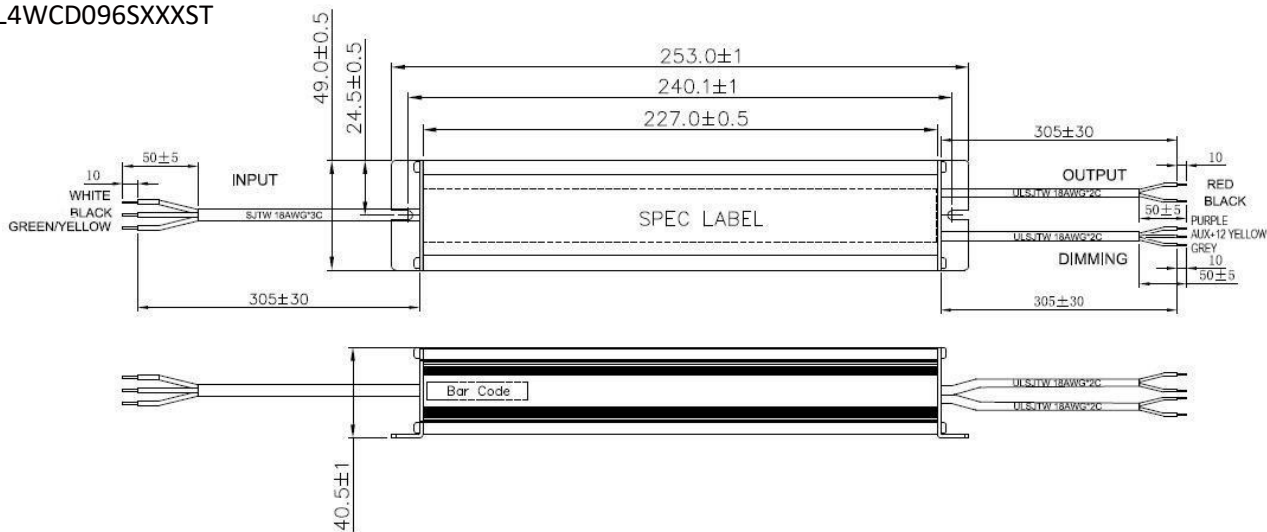
Standard power/time combination above, can be factory set to customer specification. Recycle AC to restart timer.

NOTE:

1. If the dimming function is not used, cap the dimming wires and don't use them.
2. I_o is actual output current and I_r is rated current without dimming control.
3. For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold, approximately 50% of the max. output voltage for any given mode.
4. The dimming signal can be less than 1V, when it is 0-1V, the output current can maintain about 10% I_r , however, the connected LEDs may flicker. Maintain dimming voltage greater than 1V in the application is strongly recommended.
5. Pulse width less than 10% will cause the driver to work improperly.

■ Mechanical Design

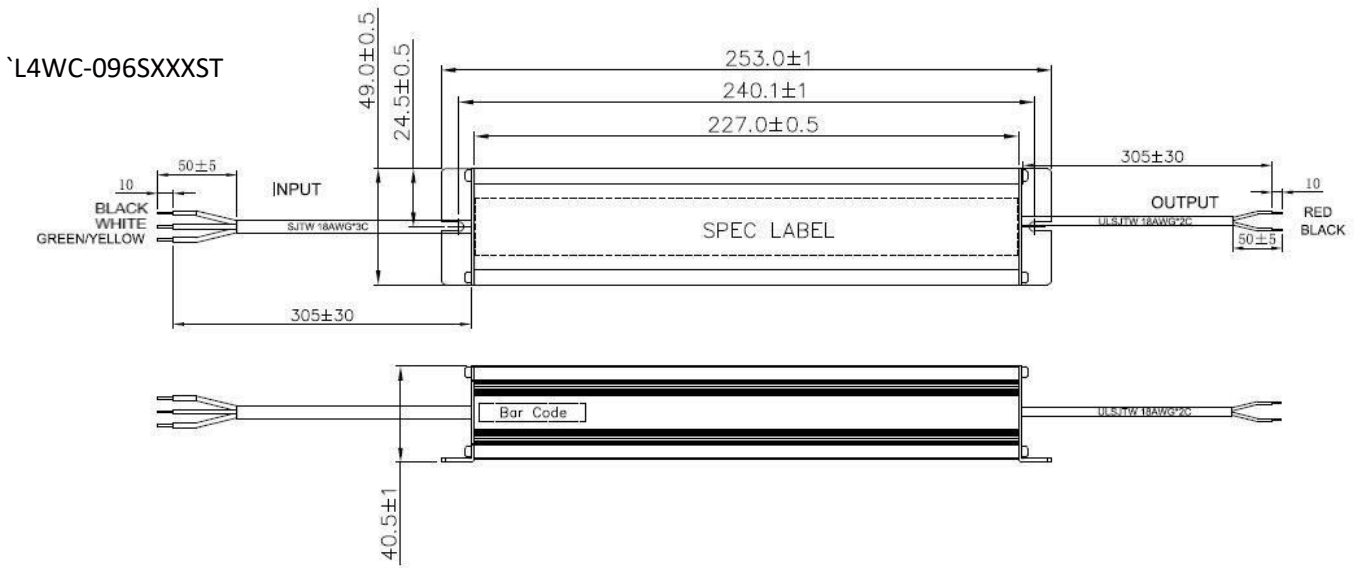
L4WCD096SXXXST



- Notes:**
1. Outline Dimension: 253*49*40.5
 2. Input and Output Connector and Pin Assignment
 3. The Yellow Dimming wire is optional for 12V Auxiliary Power

Input Wire	3/#18AWG	L= Black, N=White, GND=Green
Output	2/#18AWG	V+ is Red, V- is Black
Dimming Wire	3/#22AWG	Dim + is Purple, Dim Return is Grey, AUX12V+100mA is Yellow

■ **Mechanical Design(cont.)**



- Notes: 1. Outline Dimension: 253*49*40.5
2. Input and Output Connector and Pin Assignment

Input Wire	3/#18AWG	L= Black, N=White, GND=Green
Output	2/#18AWG	V+ is Red, V- is Black

Part Number Scheme

L W C D 096 S XXX S T

L4=LED Driver Series

W=Input Voltage 90-305VAC

C=Constant Current

D=Dimmable

096=Output Power(Watts)

T=Class I, 3 Wire Input

S=Metal case

XXX=Rated Current
Ex.) 240=2400mA
040=400mA

S=Single Output

Part Number Scheme

L W C - 096 S XXX S T

L4=LED Driver Series

W=Input Voltage 90-305VAC

C=Constant Current

"-"=Non-Dimmable

096=Output Power(Watts)

T=Class I, 3 Wire Input

S=Metal case

XXX=Rated Current
Ex.) 240=2400mA
040=400mA

S=Single Output

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***Specifications are subject to change without notice. Autec is not responsible for issues arising from errors or omissions.**

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