

■ Features

- Power Rating: 400W
- Input Voltage: 305-660Vac
- Constant voltage design
- Output current (168mA to 6400mA)
- Digital programming with external module and software
- Efficiency up to 94.5%
- Compatible with 0(0.05)-10V, PWM, external resistor, clock, DMX dimming
- Lightning, OVP, SCP, OTP & Open Circuit Protection
- IP67
- 7-year warranty
- Surge Protection: L-N 5.5kV, L/N-Earth 11kV



RoHS
Compliant



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

■ Application

- Outdoor and indoor LED lights
- LED lights with flexible current settings
- 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
L4HVP400S058ST	305-660Vac	400W	29-58V	640mA	6400mA	92.5%	UL/cUL
L4HVP400S095ST	305-660Vac	400W	47-95V	504mA	5040mA	93.5%	UL/cUL
L4HVP400S142ST	305-660Vac	400W	71-142V	336mA	3360mA	94%	UL/cUL
L4HVP400S190ST	305-660Vac	400W	95-190V	252mA	2520mA	94%	UL/cUL
L4HVP400S285ST	305-660Vac	400W	142-285V	168mA	1680mA	94.5%	UL/cUL

■ Technical Data

Input voltage range	305-660Vac
Frequency	47-63Hz
Power factor	> 0.97 @480Vac & 80~100% full load, > 0.90 @660Vac & 80~100% full load
Output voltage	29-285V

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■ Technical Data(cont.)

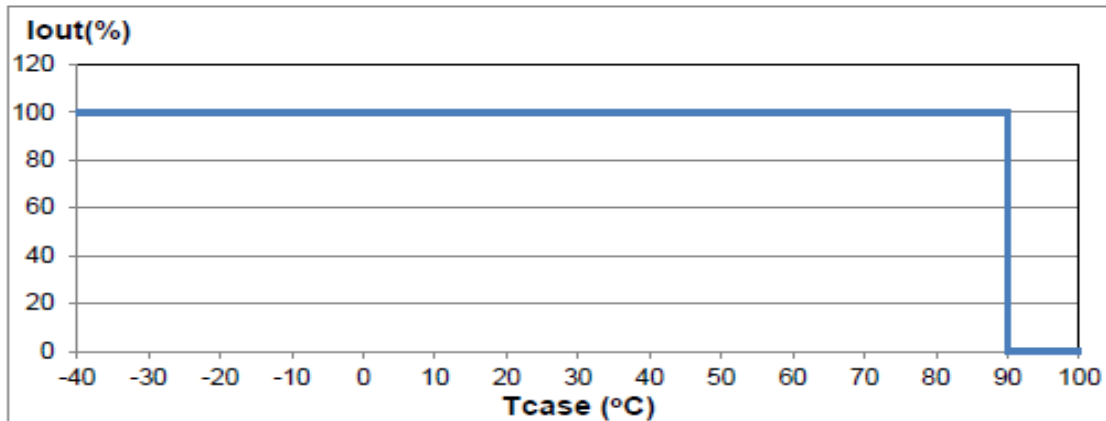
Max Current Ripple	350mA,260mA,180mA,150mA100mA
Max input current	2.7A
Max input Power	460W
Dimming	0(0.05)-10V, PWM, external resistor, clock, DMX
Output AUX Power Voltage (Optional)	12V
Output AUX Power Current (Optional)	0-200mA
Output power	400W
Max. Voltage ripple	±0.5%
Efficiency	92.5-94.5%
Max. open circuit voltage	65V, 105V, 155V, 205V, 295V
THD	< 20% @305-660 Vac & 80~100% full load
Protection	OVP, SCP, OTP, and Open Circuit Protection
Environmental Protection	UL Dry &Damp and wet
Working Temperature	-40~+70°C
Max Case Temperature	90°C
Surge Protection	L-N 5.5kV, L/N-Earth 11kV
ANSI Surge Type	1.2/50µs Combination Wave (w/t 2Ω)
Isolation (primary to Secondary)	3750Vac/10maMax/60 seconds
Dimension	230x68x42.5 mm (9.06x2.68x1.67inch)
Mounting Length	244 mm (9.61 inch)
Overall Length	254 mm (10.00 inch)
Weight	3.5 kg (7.78 lb)
Lifetime	>70,000 hours @ full load, 75°C Tcase
Packing	3.5 kg; 6 units/carton; 27 cartons/pallet

■ Safety Compliance

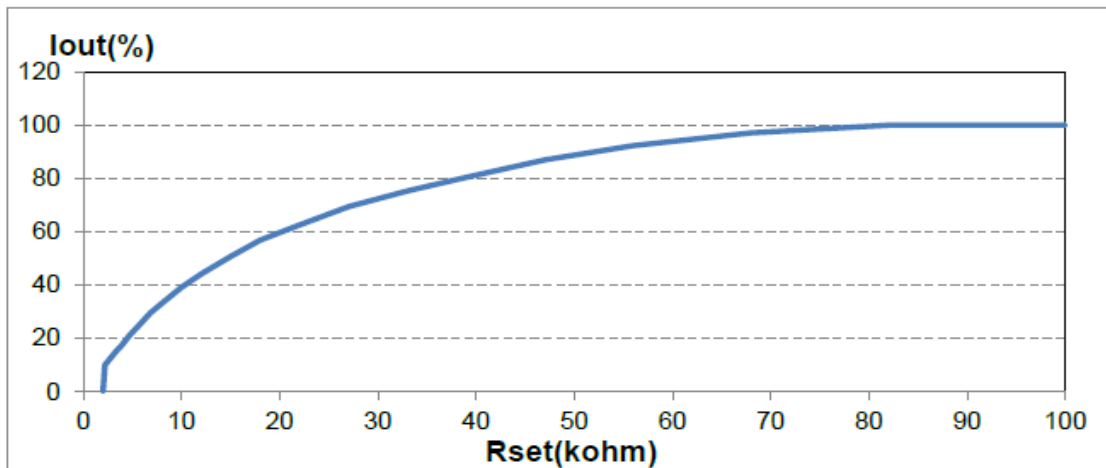
Safeties	UL8750
Electromagnetic Compliance	Per Title 47 CFR Part 15 Class B

■ **Electrical Specifications**

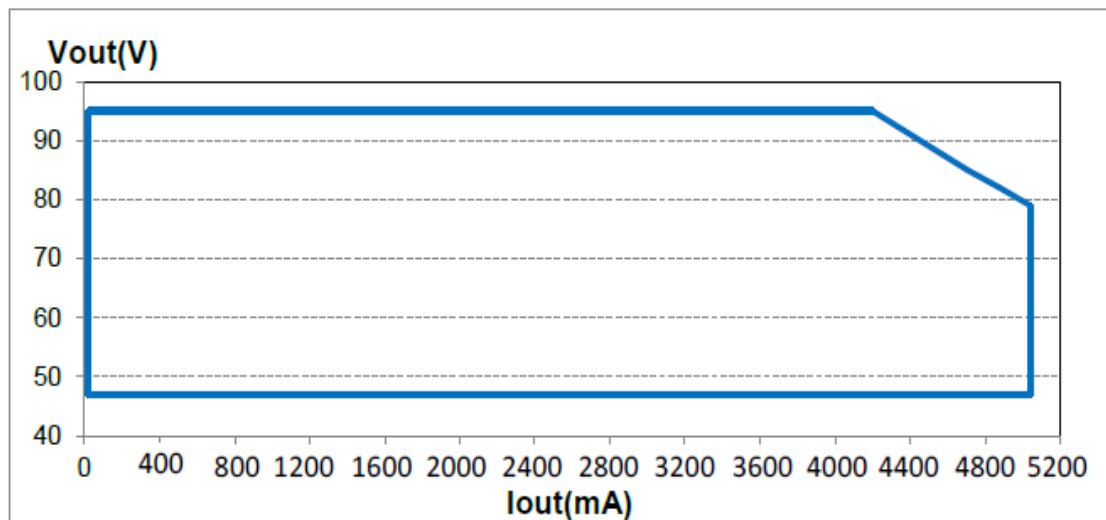
Output Current vs. Case Temperature (with $\pm 5^{\circ}\text{C}$ Tolerance)



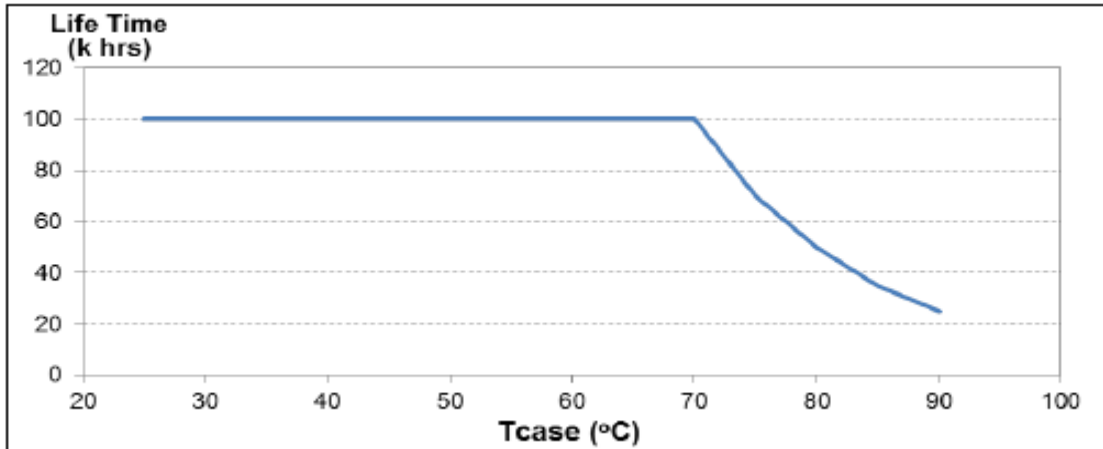
Output Current vs. External Setting Resistor



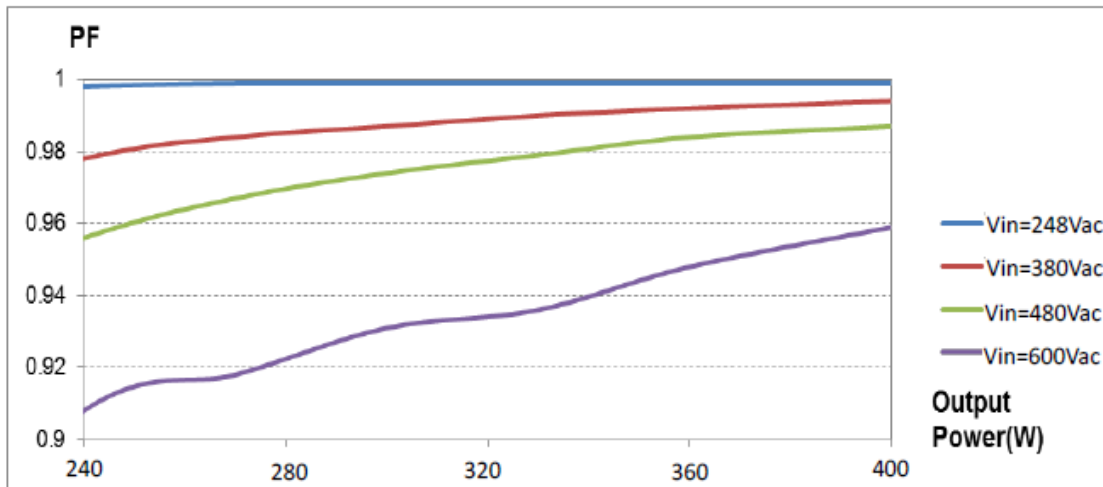
I-V Programming Area: Output Voltage vs. Output Current



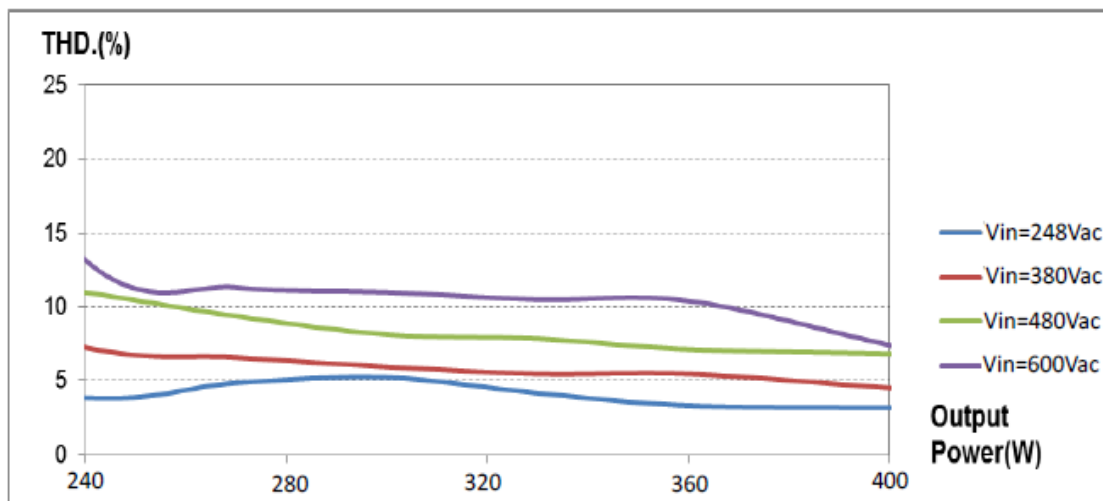
■ **Lifetime vs Case Temperature**



■ **Power Factor vs. Output Power**

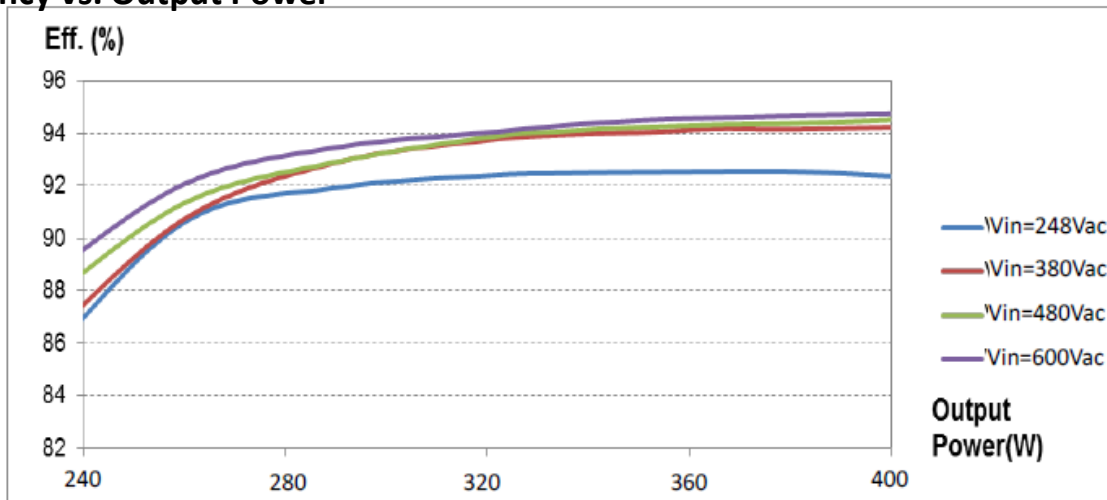


■ **THD vs. Output Power**

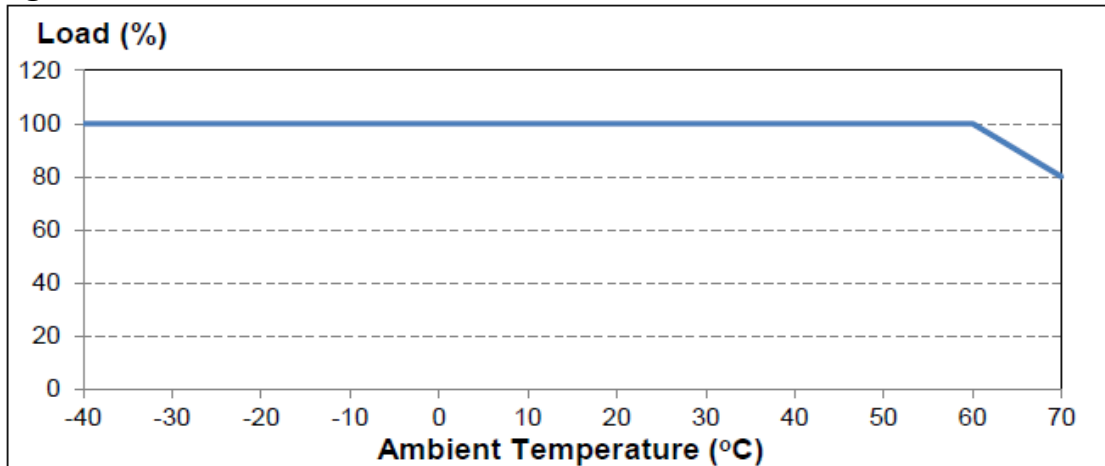


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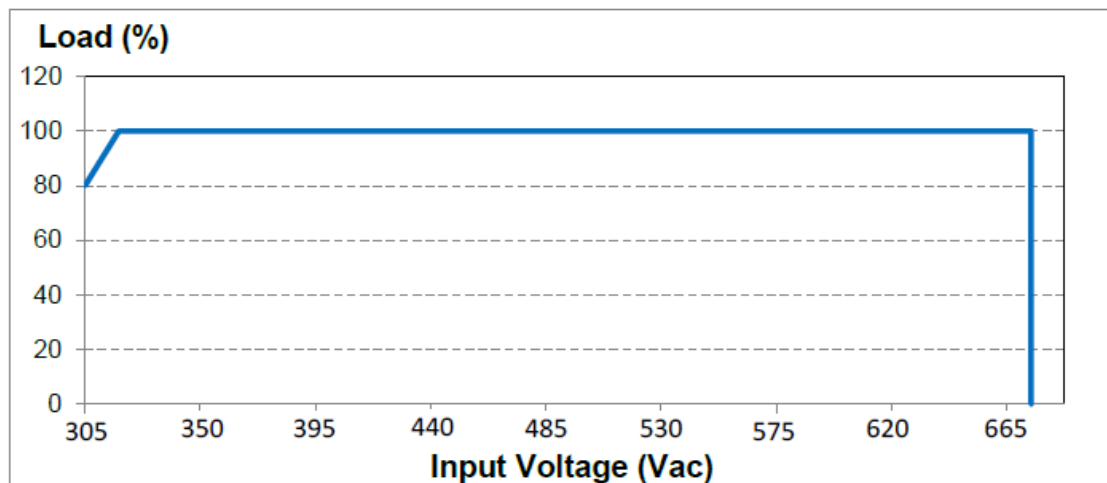
■ Efficiency vs. Output Power



■ Derating Curve

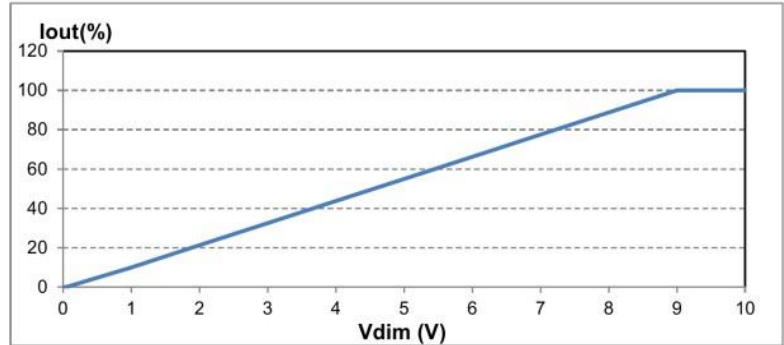
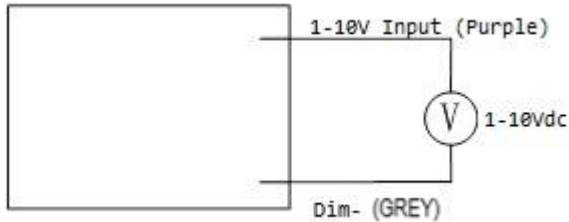


■ Static Characteristics

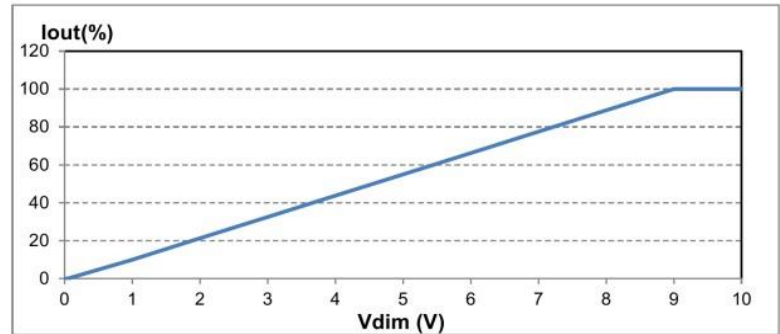
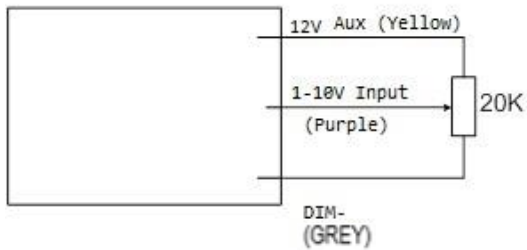


■ **Dimming**

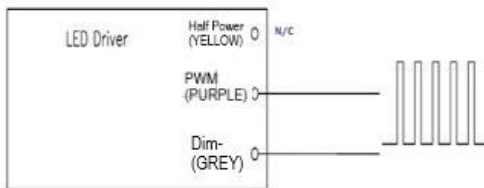
Mode 1 : 1-10Vdc Input on Dimming Control



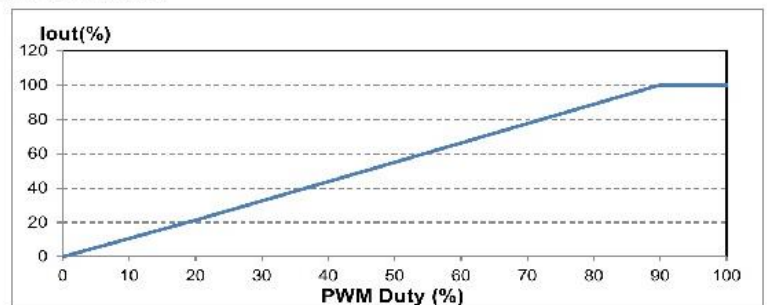
Mode 2 : Potentiometer on Dimming Control



Mode 3 : PWM Signal on Dimming Wires



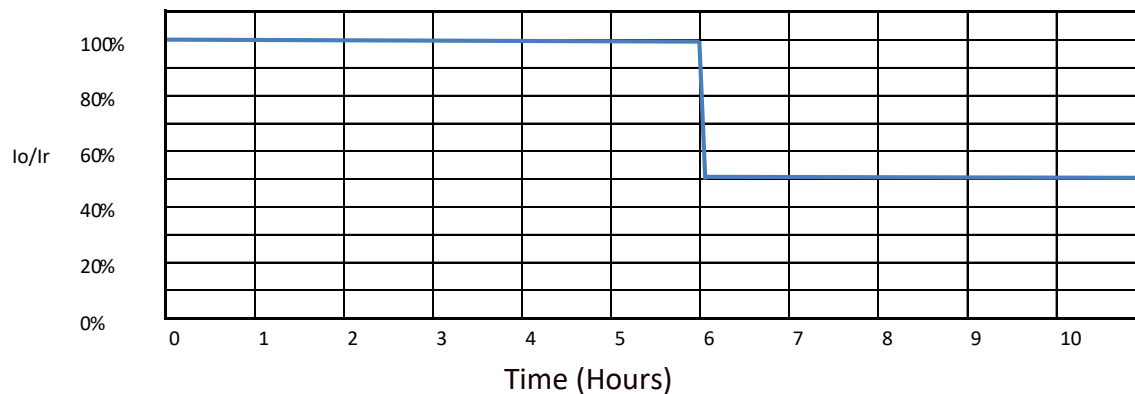
I_o/I_r vs PWM Duty



■ **Dimming(cont.)**

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)

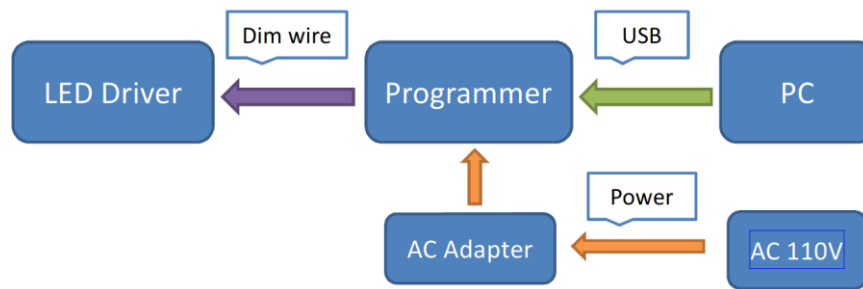


Standard power/time combination above, can be factory set to customer specification. Recycle AC to restart timer.

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.

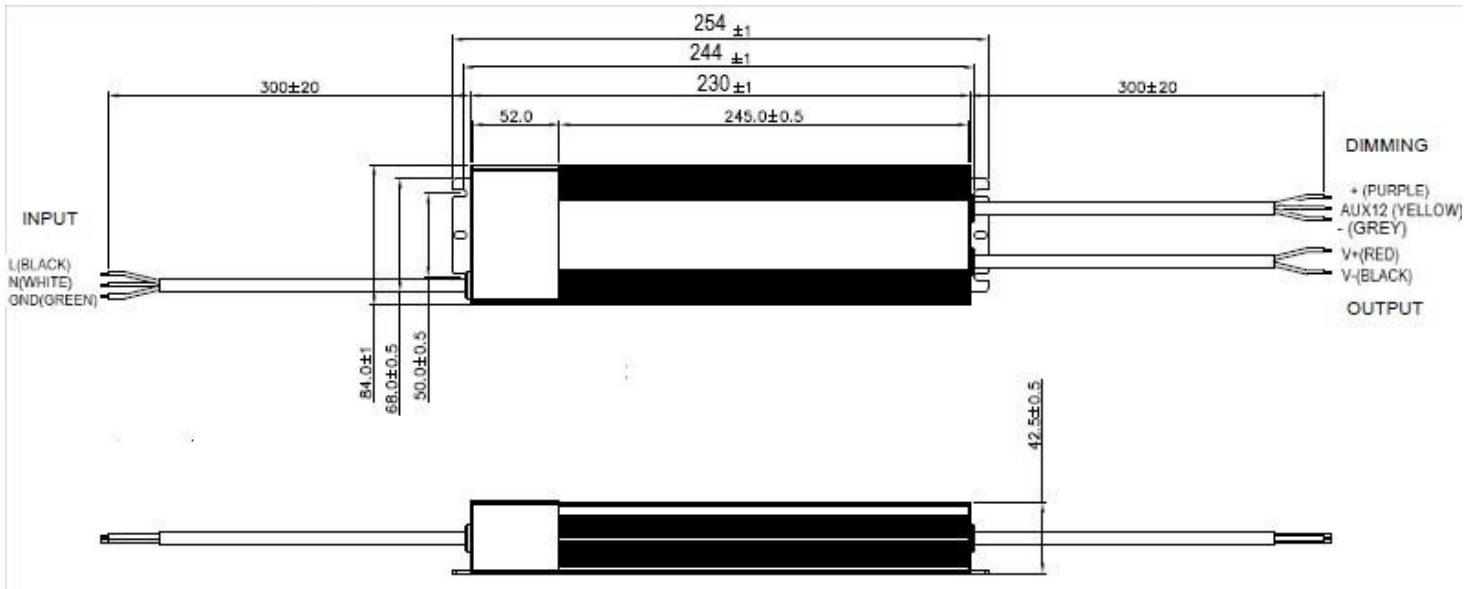
■ PC Programming Diagram



NOTES:

1. To set the desired output current, begin by installing the programming software on your PC and connect the programming module to your PC.
2. Next, connect the LED Driver to the programming module using the Dimming wires.
3. Please note an external power source is needed to provide power to the programming module.
4. Contact Autec Sales for current programming software and complete programming instructions.

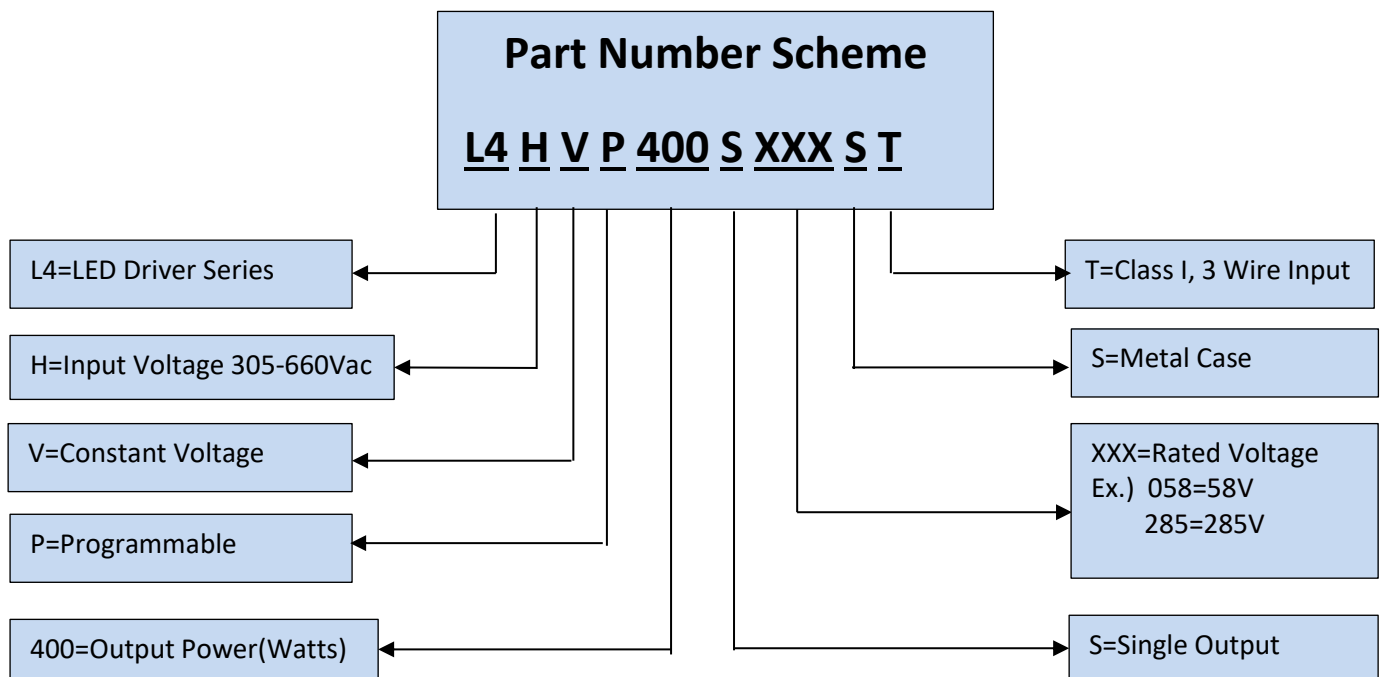
■ Mechanical Diagram



- Notes**
1. Outline Dimension 254L*68W*42.5H
 2. Input and Output Connector and Pin Assignment
 3. The Yellow Dimming wire is optional for 12V Auxiliary Power

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Wire Specifications		Colors
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



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

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