

■ Features

- Power Rating: 600W
- Input Voltage: 108-305Vac
- Constant Voltage design
- Output current (1020mA-11670mA)
- Digital programming with external module and software
- Compatible with 0(0.05)-10V, PWM, external resistor, clock, DMX dimming
- Efficiency up to 96%
- Lightning, OVP, SCP, OTP & Open Circuit Protection
- IP67
- 7-year warranty
- Surge Protection: L-N 5.5kV, L/N-Earth 11kV



*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
- Parking lights and Architecture decoration lights
- LED horticulture lights
- LED fishing lights

■ 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
L4WVP600S036ST	108~305Vac	600W	24-36V	1667mA	16670mA	95.5%	UL/cUL
L4WVP600S048ST	108~305Vac	600W	36-48V	1420mA	14200mA	95.5%	UL/cUL
L4WVP600S054ST	108~305Vac	600W	36-54V	1111mA	11110mA	96%	UL/cUL
L4WVP600S059ST	108~305Vac	600W	42-58.8V	1020mA	10200mA	96%	UL/cUL

■ Technical Data

■ Technical Data(cont.)

Input voltage range	108-305Vac
Frequency	47-63Hz
Power factor	> 0.95 @120Vac & 80~100% full load, > 0.90 @277Vac & 80~100% full load
Output voltage	36-58.8V
Output power	600W
Max. Voltage ripple	250mVp-p
Max input current	6.5A
Max input Power	680W

Technical Sales / Customer Service: +1-818-338-7788 • Email: sales@autec.com
31328 Via Colinas Suite 102 • Westlake Village, CA 91362 USA • www.autec.com

Efficiency	95.5%-96%
Output AUX Power Voltage (optional)	12V
Output AUX Power Current (optional)	0-100mA
Max. open circuit voltage:	39V, 51V, 61.8V, 61.8V
THD	< 20% @120- 277Vac & 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
Isolation (Primary to Earth)	1875Vac / 10mAMax / 60seconds
Isolation (Secondary to Earth)	500Vac / 10mAMax / 60seconds
Case Type	Metal
Dimension	280x123x54 mm (11.02x4.84x2.13 inch)
Mounting Length	290 mm (11.42inch)
Overall Length	304 mm (11.97 inch)
Weight	3.56 kg (7.85 lb)
Lifetime	>70,000 hours @ full load, 75°C Tcase
Packing	3.56 kg: 6 units/carton; 27 cartons/pallet

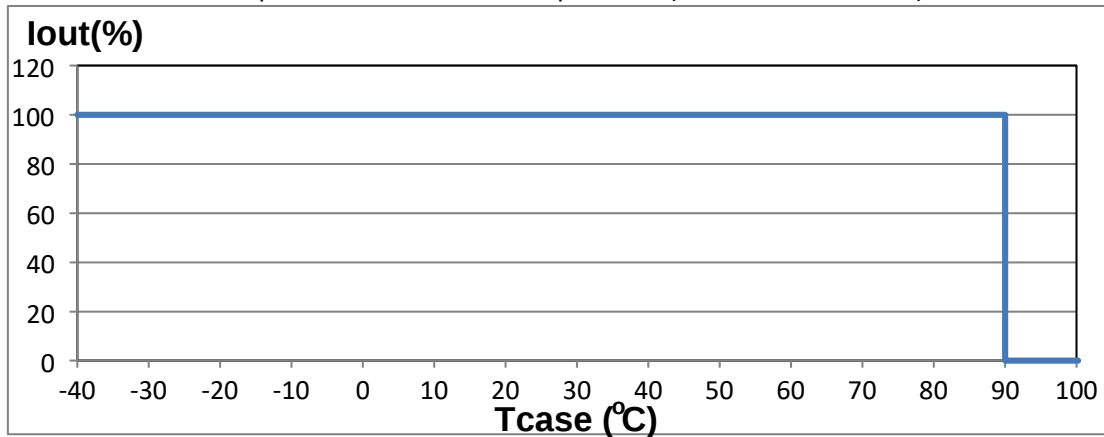
■ Safety Compliance

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

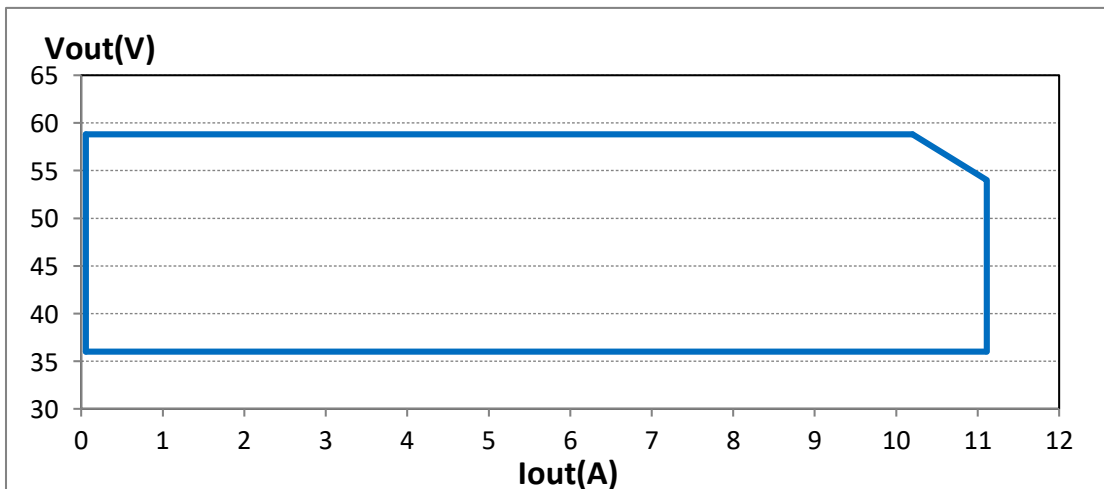
■ Electrical Specifications*(L4WVP600S054ST @25°C)

Technical Sales / Customer Service: +1-818-338-7788 • Email: sales@autec.com
 31328 Via Colinas Suite 102 • Westlake Village, CA 91362 USA • www.autec.com

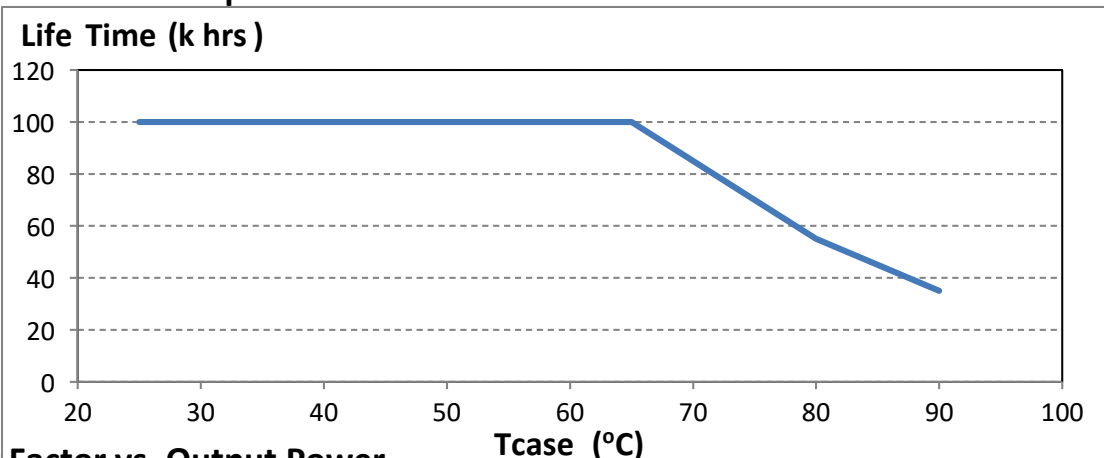
Output Current vs. Case Temperature (with $\pm 5^\circ\text{C}$ Tolerance)



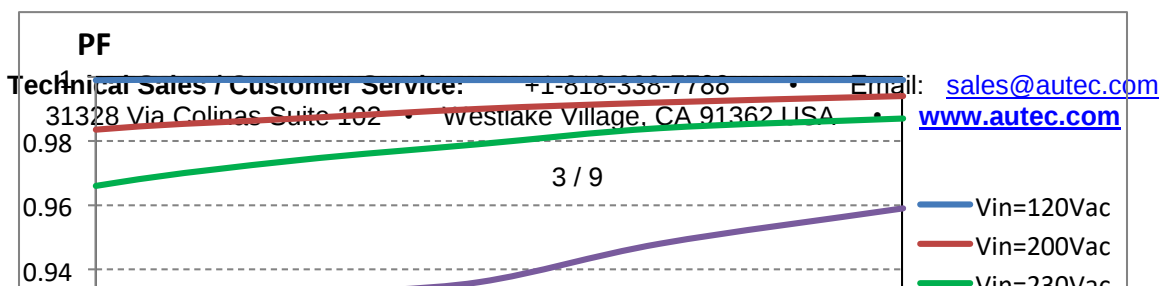
I-V Programming Area: Output Voltage vs. Output Current



■ Lifetime vs Case Temperature

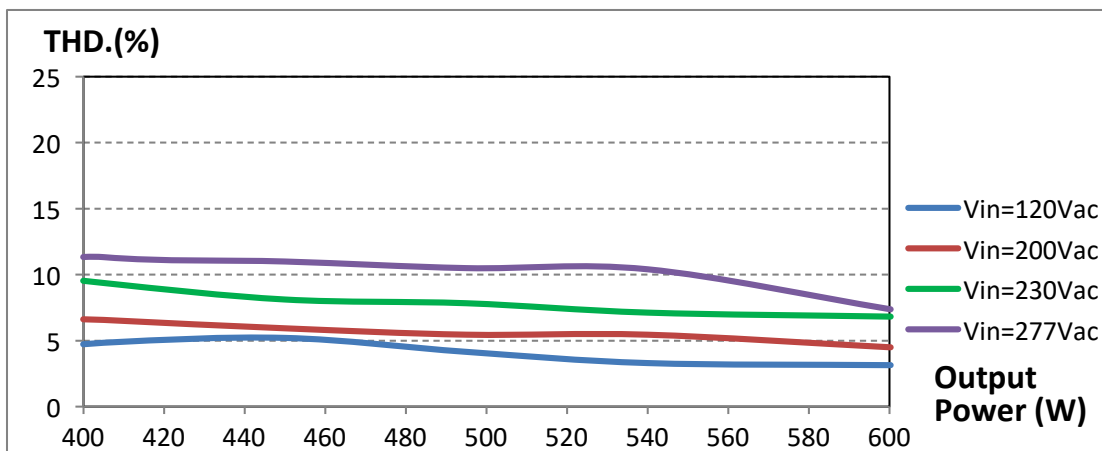


■ Power Factor vs. Output Power

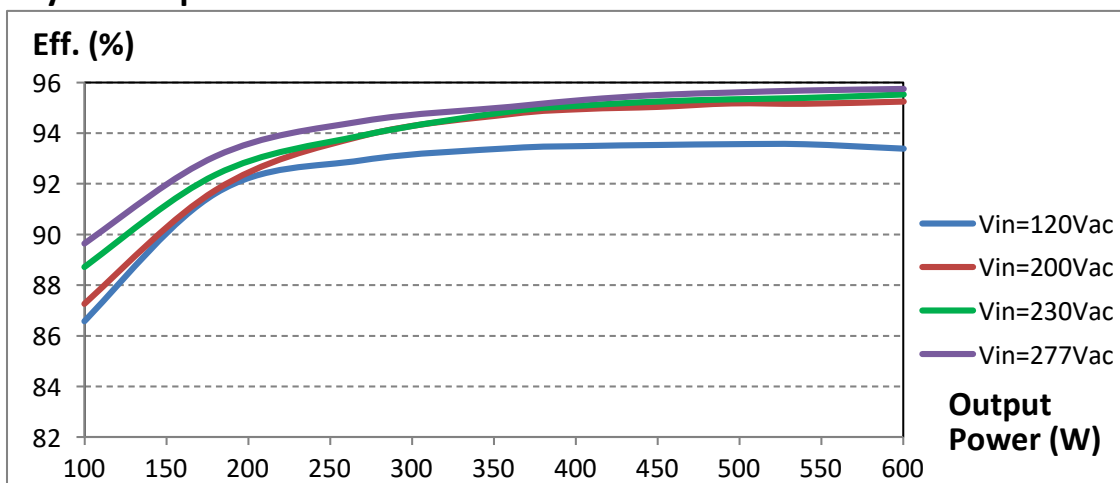


Technical Sales / Customer Service: +1-818-338-7766 Email: sales@autec.com
31328 Via Colinas Suite 102 • Westlake Village, CA 91362 USA www.autec.com

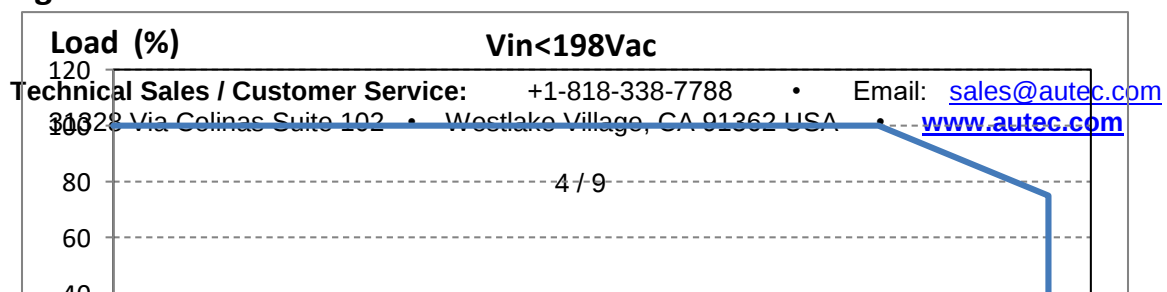
THD vs. Output Power

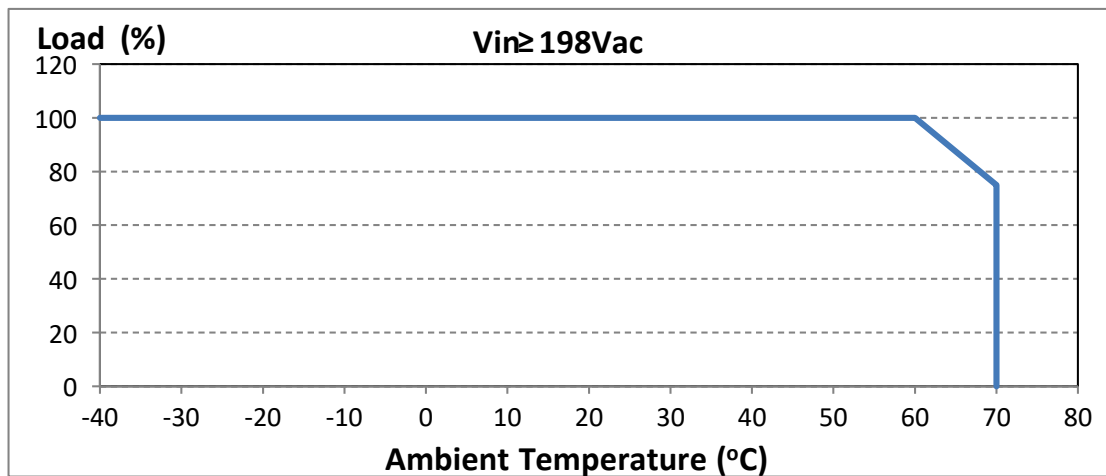


Efficiency vs. Output Power

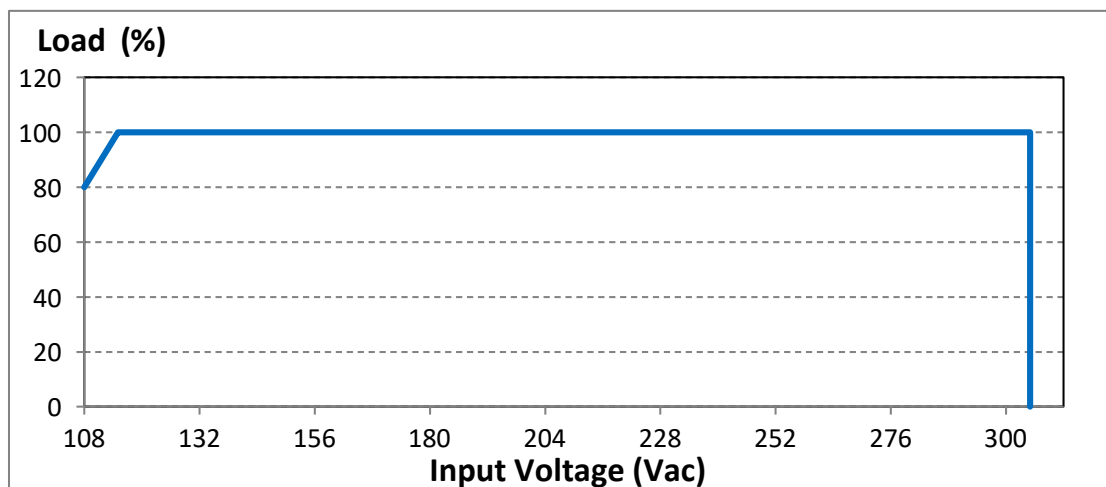


Derating Curve





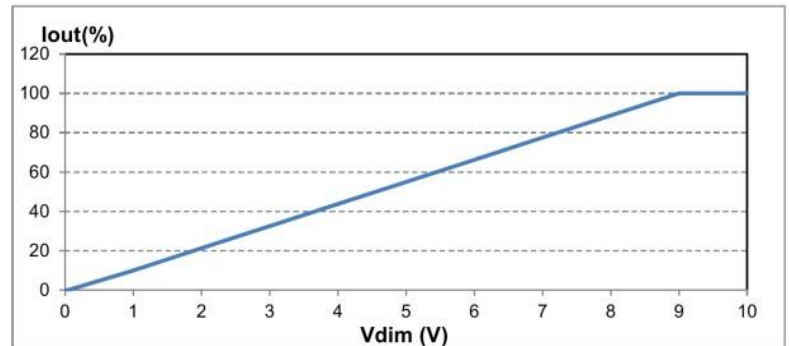
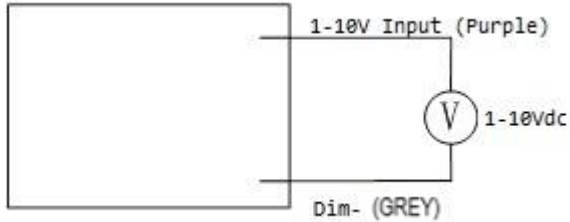
■ Static Characteristics



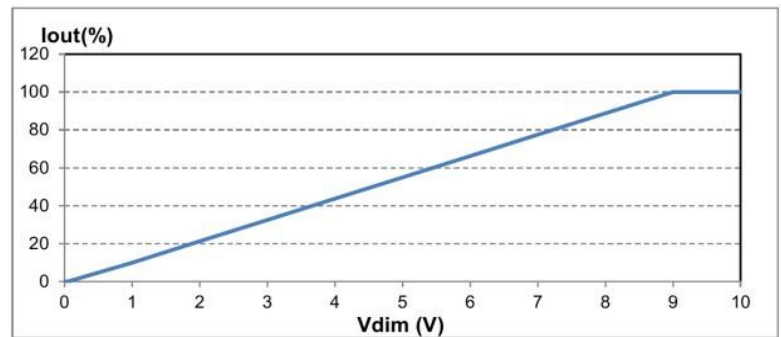
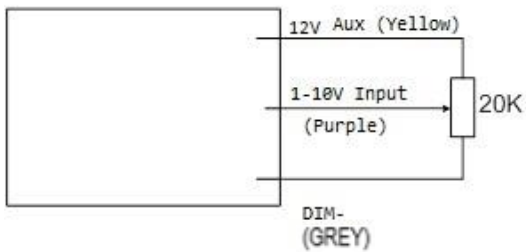
■ Dimming

Technical Sales / Customer Service: +1-818-338-7788 • Email: sales@autec.com
31328 Via Colinas Suite 102 • Westlake Village, CA 91362 USA • www.autec.com

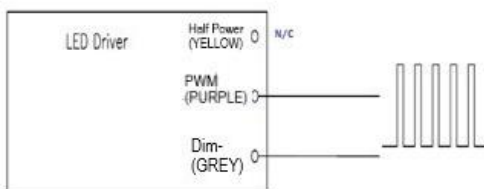
Mode 1 : 1-10Vdc Input on Dimming Control



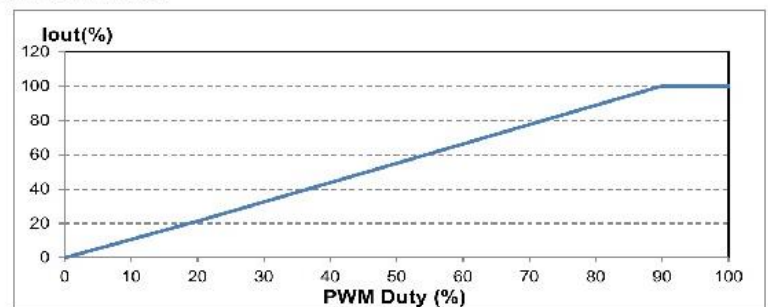
Mode 2 : Potentiometer on Dimming Control



Mode 3 : PWM Signal on Dimming Wires



Io/Ir vs PWM Duty

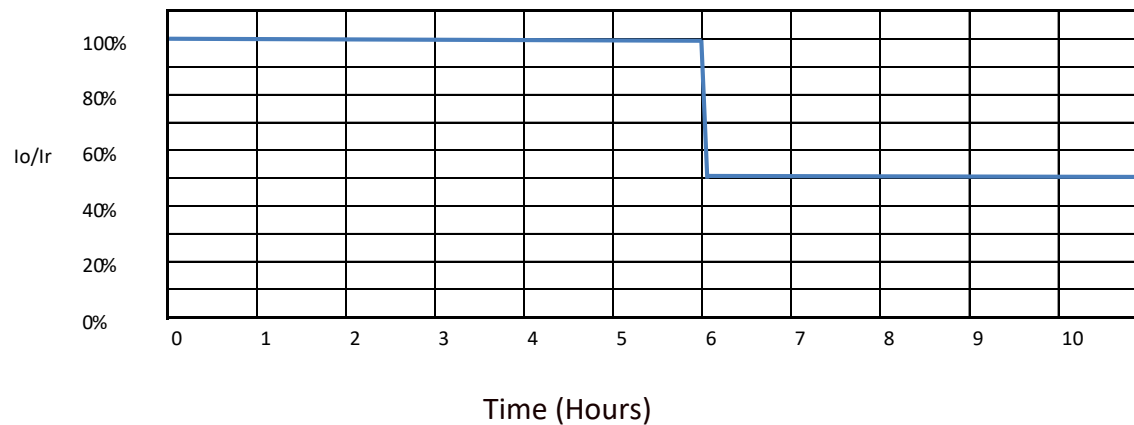


■ **Dimming(cont.)**

Technical Sales / Customer Service: +1-818-338-7788 • Email: sales@autec.com
31328 Via Colinas Suite 102 • Westlake Village, CA 91362 USA • www.autec.com

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)

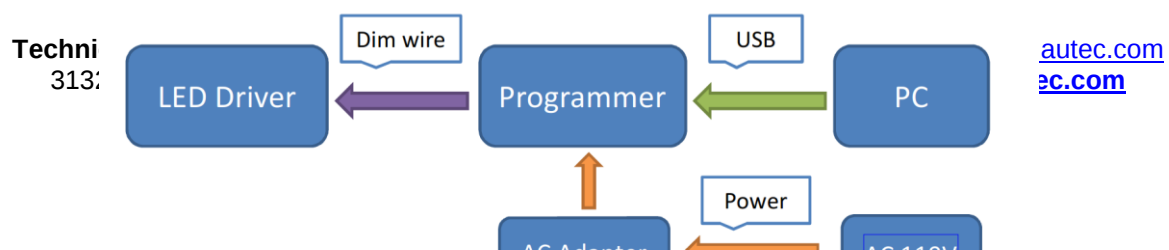


Standard power/time combination above, can be factory set to customer specification. Recycle AC to restart timer.

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.

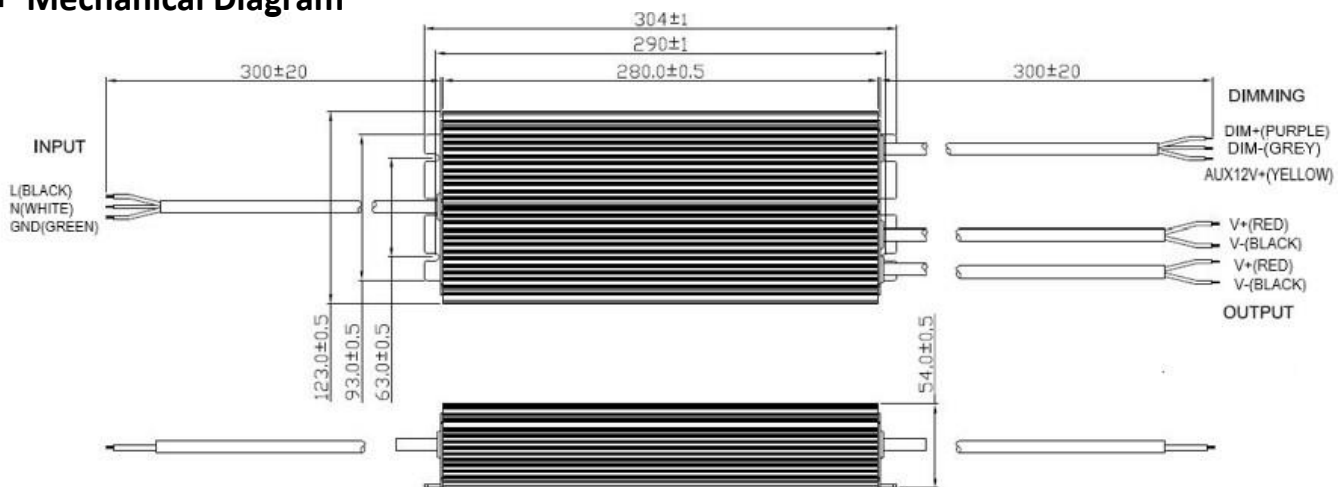
PC Programming Diagram



NOTES:

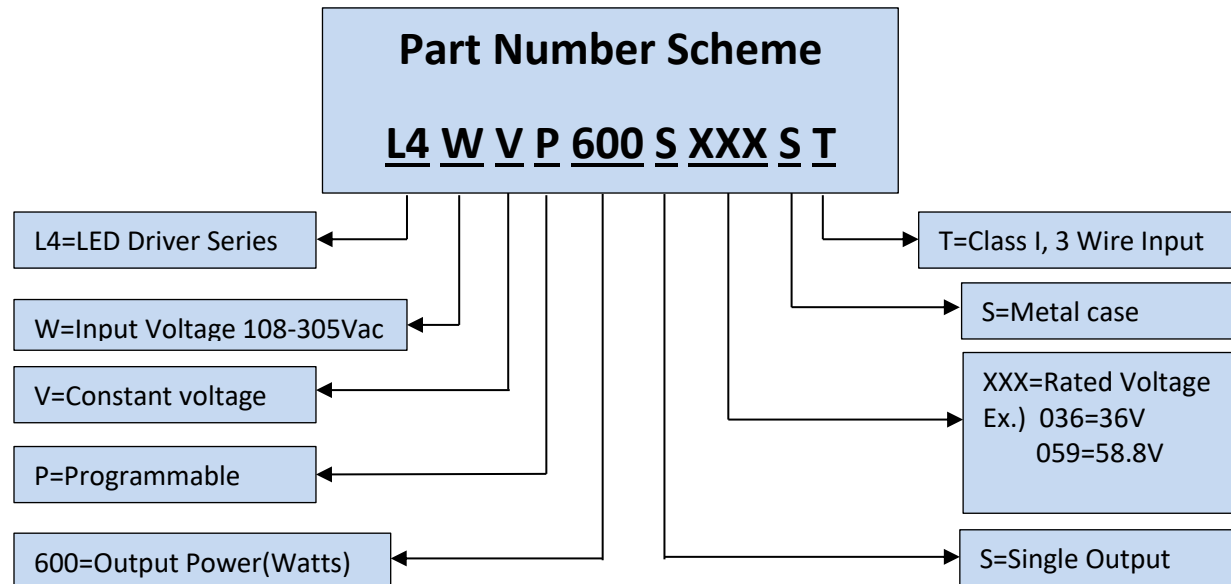
1. To set the desired output current, begin by installing the programming software on your PC and connect the programming module to your PC.
2. Next, connect the LED Driver to the programming module using the Dimming wires.
3. Please note an external power source is needed to provide power to the programming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

■ Mechanical Diagram



- Notes:**
1. Outline Dimension: 304L*123W*54H
 2. Input and Output Connector and Pin Assignment
 3. The Green Dimming wire is optional for 12V Auxiliary Power

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.**