RoHS 2

Compliant



96W, 120-277Vac Input, Programmable Constant Power LED Driver

Features

• Power Rating: 96W

Input Voltage: 120-277Vac

- Constant current and constant voltage hybrid output
- Output current (270mA-4000mA)
- Output current programmable with Near Field Communication controller
- Efficiency to 93%
- Compatible with 0-10V, PWM, Timer, Dim-to-off option, 12V/200mA AUX
- UL Class 2 options available, Type HL, Type TL
- Lightning, OVP, SCP, OTP, & Over Current Protection
- IP67
- 5-year warranty
- Surge Protection: Diff: 6kV, Common: 10kV

Application

- Indoor and outdoor applications
- **Model List***(See part number scheme for model number details)





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

Model Number	Input Voltage Range	Output Power	Output Voltage	Output Current Min.	Output Current Max.	Efficiency 110V/220V	Certification
L2WCP096S400ST*-XYZ	120-277Vac	96W	24-36V	1600mA	4000mA	90%/91%	UL/cUL
L2WCP096S267ST*-XYZ	120-277Vac	96W	36-48V	1070mA	2670mA	89%/91%	UL/cUL
L2WCP096S200ST-XYZ	120-277Vac	96W	48-80V	800mA	2000mA	91%/93%	UL/cUL
L2WCP096S120ST-XYZ	120-277Vac	96W	80-140V	480mA	1200mA	91%/93%	UL/cUL
L2WCP096S069ST-XYZ	120-277Vac	96W	140-233V	270mA	690mA	91%/92%	UL/cUL

^{*}Class 2 output (Add-J for J-Box, EX.) L2WCP096SXXXST-J-XYZ; Contact Autec Sales for all options.)

Ordering options				
XY= Programmable	Z=Dimming			
FC-Near Field Communication	D =DALI Dimming			
FC=Near Field Communication	B =BLE Dimming			

■ Technical Data

Input voltage range	120-277Vac
Frequency	47-63Hz
Power factor	> 0.99 @115Vac & 80~100% Full load, > 0.97 @230Vac & 80~100% Full load
Output voltage	24-233V
Output power	96W
Ripple and Noise	2.0%Vo

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Technical Data(cont.)

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Max input current	0.94A @115Vac, 0.45A@230Vac	
Max input Power	96W	
Efficiency	90-93%	
Line Regulation	\pm 0.3%	
Load Regulation	±0.6%	
Inrush Current	65A @230Vac cold start +25°C	
Dimming	0~10V/ PWM/ Timer, Dim-to-off option	
THD	< 20%	
Current Programmable	Yes	
Output Current Programmable Range	270-4000mA	
Over Current Protection	Protection type: Constant current limiting, recovers automatically after fault condition is removed	
Short Current Protection	Hiccup mode, recovers automatically after fault condition is removed	
Over Voltage Protection	1.3Vo, Protection type: Hiccup mode, recovers automatically after fault condition is removed	
Over Temp. Protection	Hiccup mode, recovers automatically after fault condition is removed	
Operating Temperature	-35~+70°C	
Max T-case Temp.	85°C	
Operating Humidity	10 ~ 100% RH non-condensing	
Storage Temp., Humidity	-40 ~+85°C, 5 ~ 100% RH	
Temp. Coefficient	±0.05%°C (0~50°C)	
Vibration	10~500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes	
Dimensions	176x70x37mm 6.9x2.75x1.26 in	
Packing	25pcs/carton	
Weight	758.7g	
Safety Compliance		
Safety Standards	UL8750, UL935, UL1012, CSA-C22.2 No.107.1, EN61347-1, EN61347-2-13	
Withstand Voltage	I/P – O/P: 3.75kVAC	
Isolation Resistance	I/P – O/P: 100M Ohms / 500VDC /25°C / 70% RH	
EMC Emission	Compliance to EN55015, EN61000-3-2 Class C (≥60% load); EN61000-3-3	

Safety Standards	UL8750, UL935, UL1012, CSA-C22.2 No.107.1, EN61347-1, EN61347-2-13	
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EMC Emission	Compliance to EN55015, EN61000-3-2 Class C (≥60% load); EN61000-3-3	
EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024	

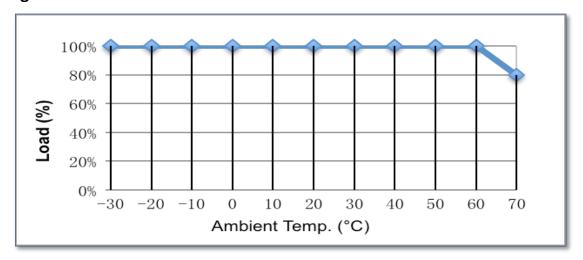
Disclaimer:

Autec Power Systems' (Autec) LED Drivers are Hi-Pot tested during the manufacturing process. Autec assumes no responsibility for secondary Hi-Pot testing at customer location or designated production line(s). Should customer require further Hi-Pot testing, at their own production line, following assembly of the LED Driver into the customer's assembled fixture, Autec requests advance notice. This request must be communicated to Autec in a timely manner and is recommended to be requested at time of issuing each purchase order.

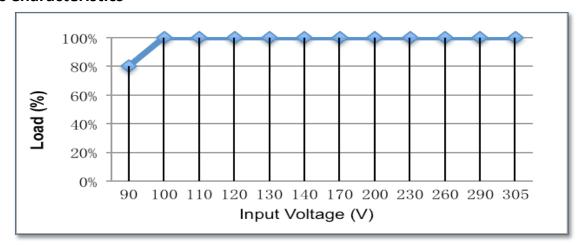
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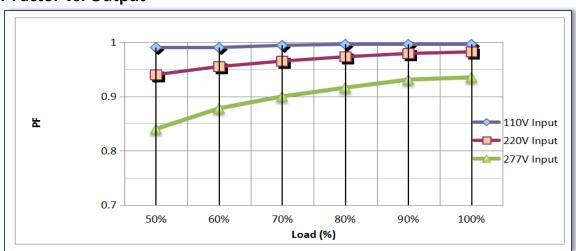
Derating curve



■ Static Characteristics



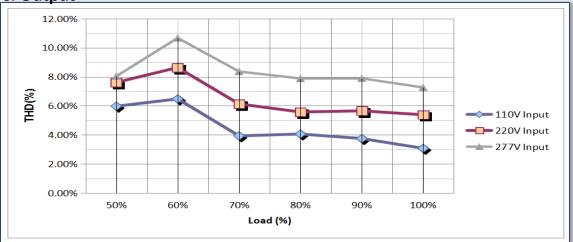
■ Power Factor vs. Output



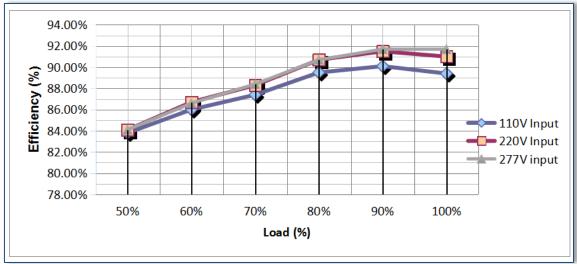
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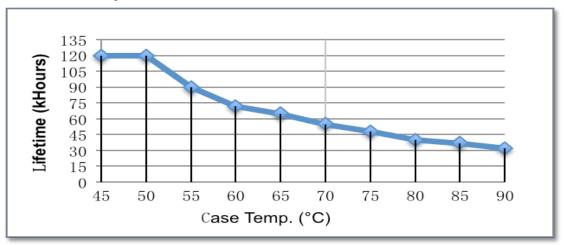
■ THD vs. Output



■ Efficiency vs Output



■ Lifetime vs Case Temp.



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Near Field Communication Controller

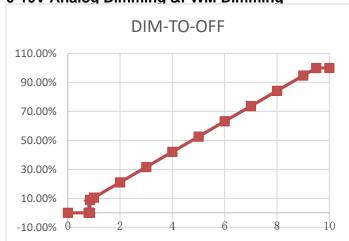


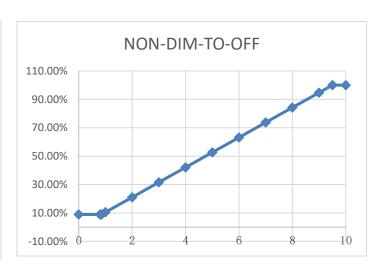
NOTE:

- 1. The Near Field Communication controller can program the output current, voltage and timer delays.
- 2. The Near Field Communication programming is a non-contact process, therefore much safer compared to traditional programming methods.
- 3. Power devices can be programmed without AC power applied to the driver.

Dimming

0-10V Analog Dimming &PWM Dimming





GND	Grey
Dimming wire 0-10V&PWM	Purple
12V AUX	Yellow
Input Dimming Voltage	0-10V
DIM+ Source Current	0-1mA
12V AUX Source Current	200mA
PWM Frequency Range	0.5-3KHZ
PWM high level	10V

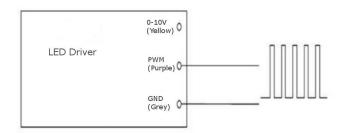
NOTE:

- 1. Io is actual output current and Ir is rated current without dimming control.
- 2. For the driver to operate properly, the load voltage must be in the working voltage range.
- 3. We have DIM-TO-OFF option, which can be programmed by the programmer.
- 4. Maximum input voltage for the dimming wire is 12V.
- 5. AUX wire is only for source, can't connect to other voltage source.

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PWM Dimming

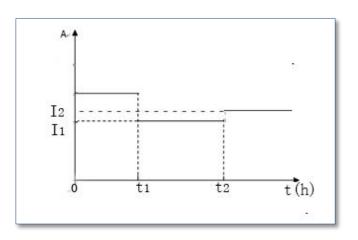




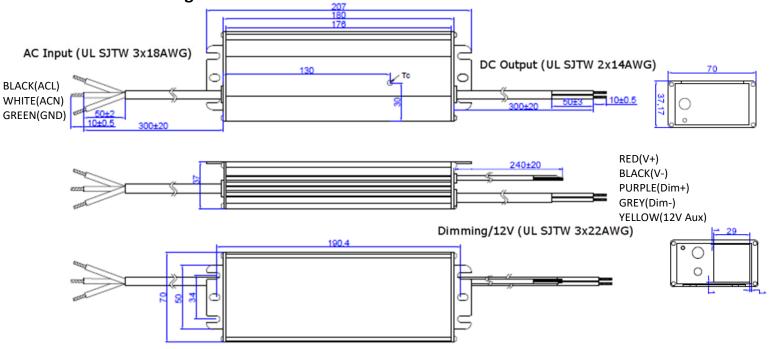
TIMER Dimming

NOTE:

- 1. The dimming time can be programmed by the programmer.
- 2. The time of t1 and t2 can be set by the programmer.(0.5h step)
- 3. The value of I1 and I2 can be set by the programmer.
- 4. Changing the current from I1 to I2 may take a few min.

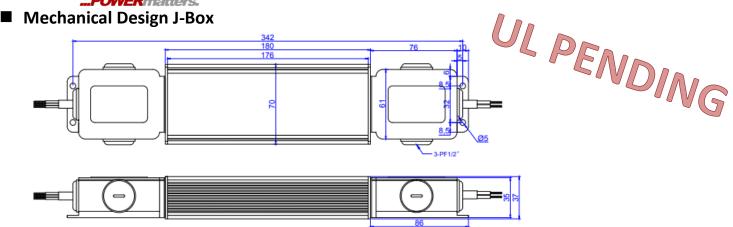


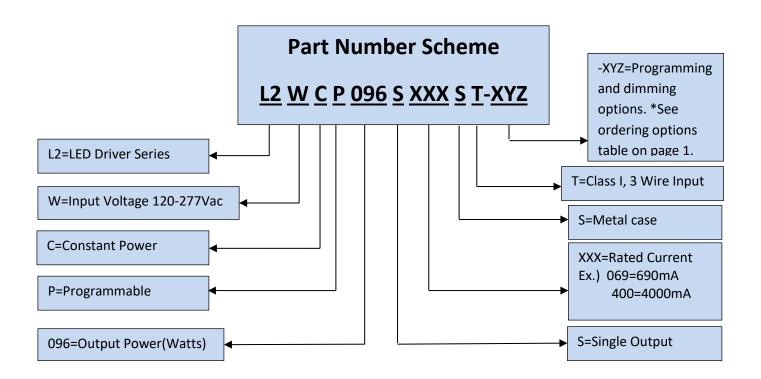
Mechanical Design



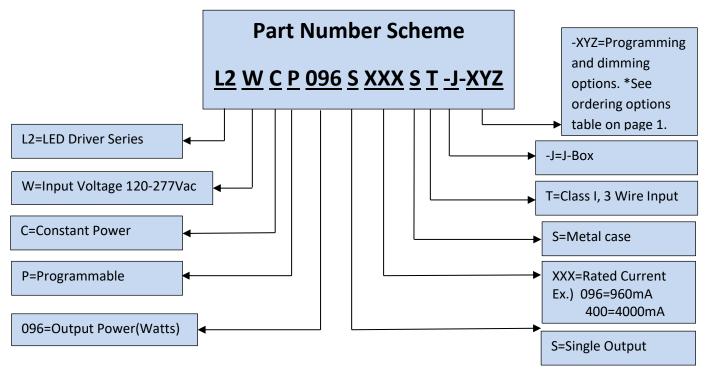
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^{*}Specifications are subject to change without notice. Autec is not responsible for issues arising from errors or omissions.