

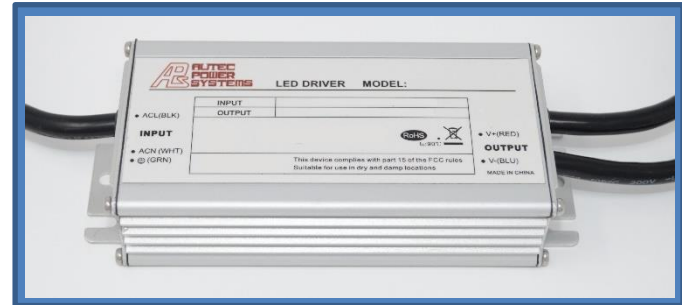
### ■ Features

- Power Rating: 120W
- Input Voltage: 120-277Vac
- Constant current and constant voltage hybrid output
- Output current (340mA-5000mA)
- Output current programmable with Near Field Communication controller
- Efficiency to 94%
- Compatible with 0-10V, PWM, Timer, Dim-to-off option, 12V/200mA AUX
- UL, Type HL, Type TL
- Lightning, OVP, SCP, OTP, & Over Current Protection
- IP67
- 5-year warranty
- Surge Protection: Diff: 6kV, Common: 10kV



\*Near Field Communication controller

**RoHS**  
Compliant



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

### ■ Application

- Indoor and outdoor applications

### ■ 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 110V/220V	Certification
L2WCP120S500ST-XYZ	120-277Vac	120W	24-36V	2000mA	5000mA	92%/94%	UL/cUL
L2WCP120S333ST-XYZ	120-277Vac	120W	36-48V	1330mA	3330mA	91%/93%	UL/cUL
L2WCP120S250ST-XYZ	120-277Vac	120W	48-80V	1000mA	2500mA	90%/92%	UL/cUL
L2WCP120S150ST-XYZ	120-277Vac	120W	80-140V	600mA	1500mA	92%/93%	UL/cUL
L2WCP120S086ST-XYZ	120-277Vac	120W	140-233V	340mA	860mA	92%/93%	UL/cUL

(Add-J for J-Box, Ex.) L2WCP120SXXXST-J-XYZ; Contact Autec Sales for all options.)

Ordering options	
XY= Programmable	Z=Dimming
FC=Near Field Communication	D=DALI Dimming
	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	120W

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**■ Technical Data(cont.)**

Ripple and Noise	2.0%Vo
Max input current	1.17A @115Vac, 0.57A@230Vac
Max input Power	120W
Efficiency	90-94%
Line Regulation	±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	340-5000mA
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
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.

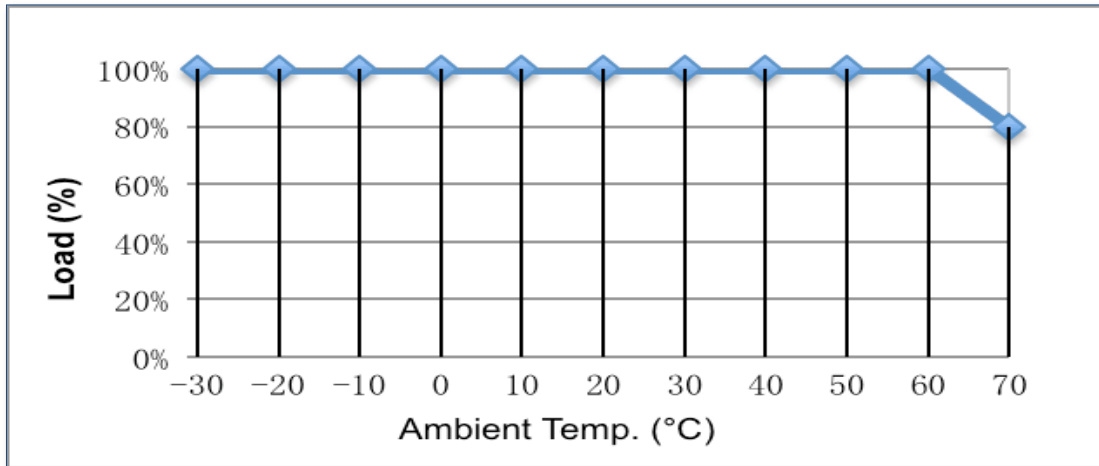
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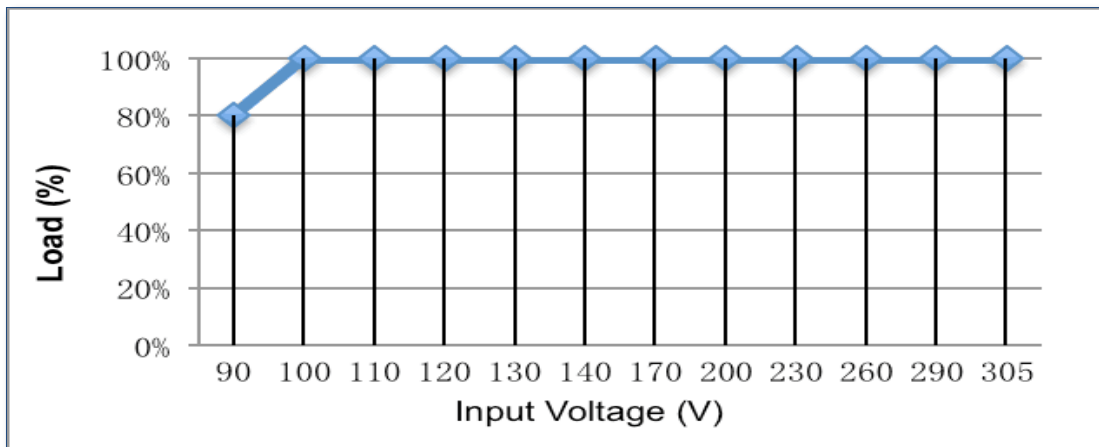
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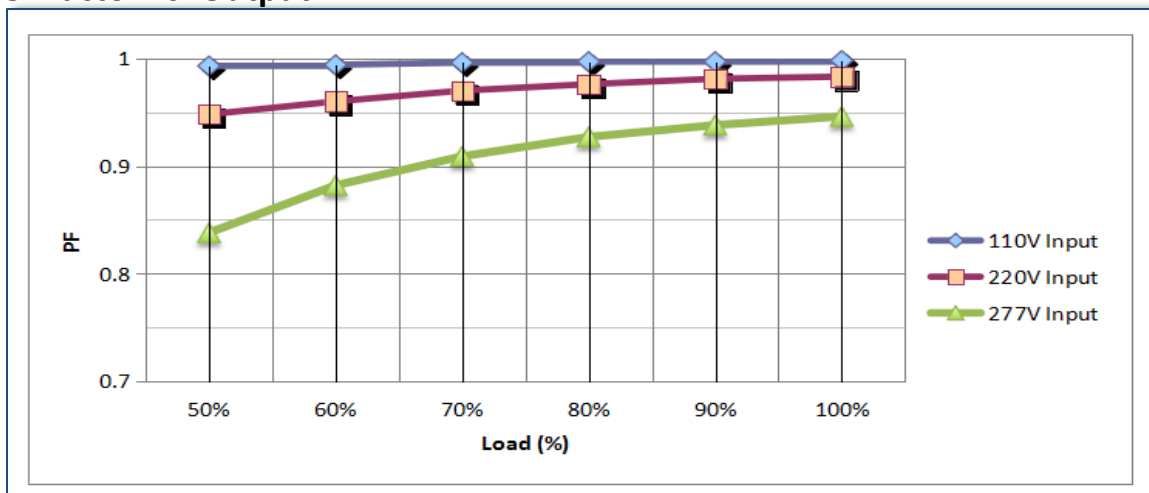
■ **Derating curve**



■ **Static Characteristics**



■ **Power Factor vs. Output**



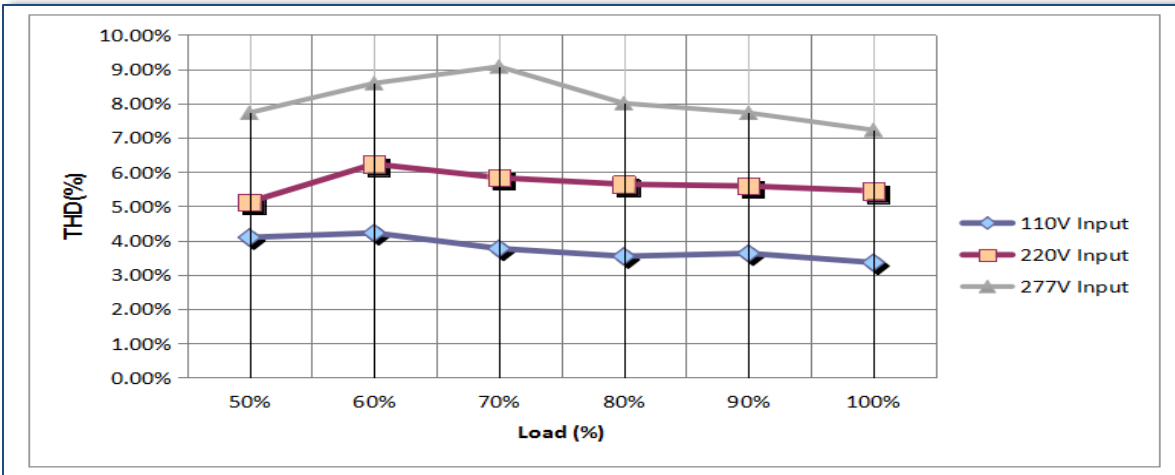
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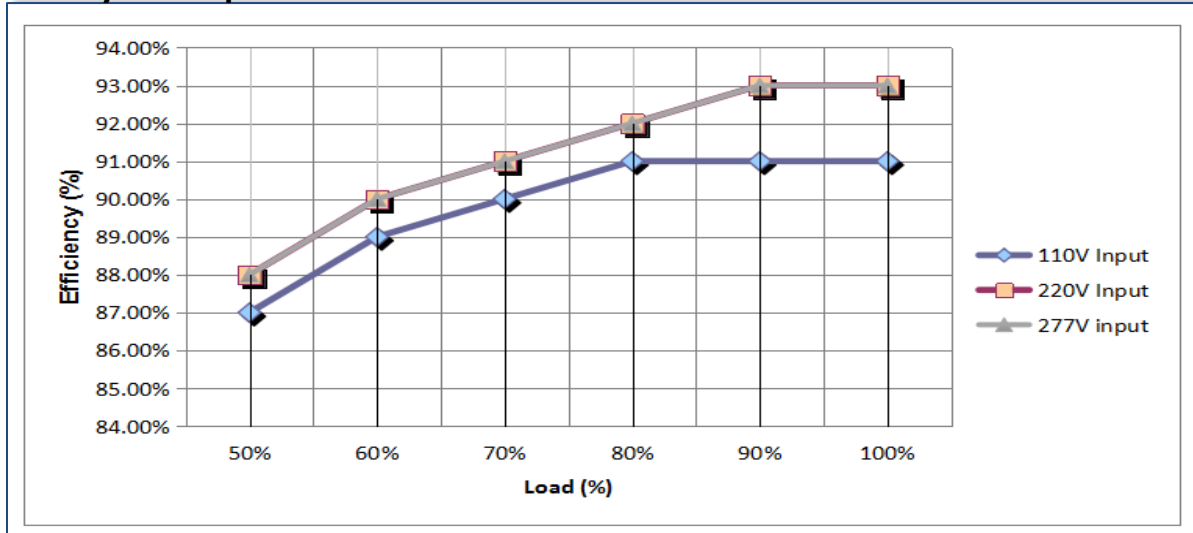
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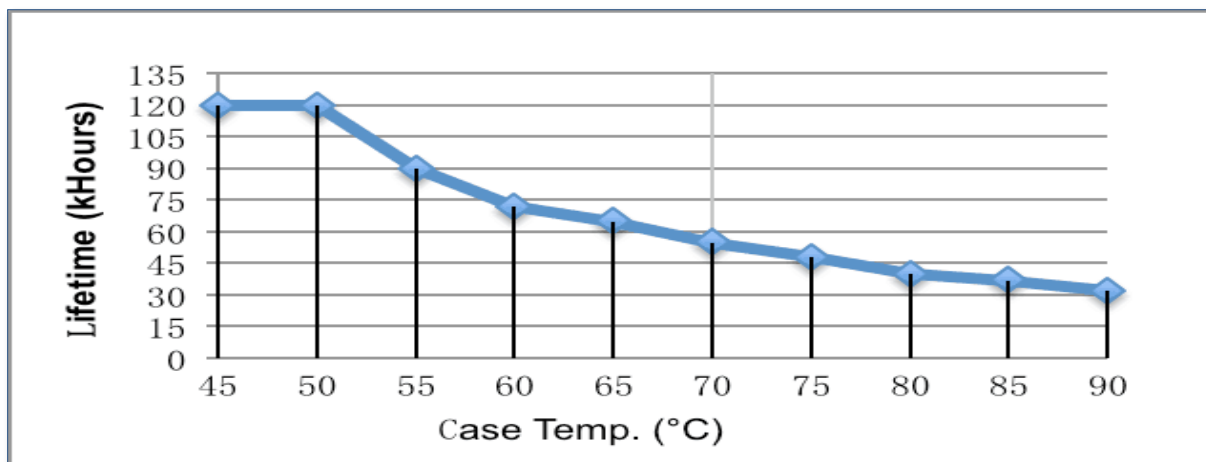
■ **THD vs. Output**



■ **Efficiency vs Output**



■ **Lifetime vs Case Temp.**



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## ■ Near Field Communication Controller

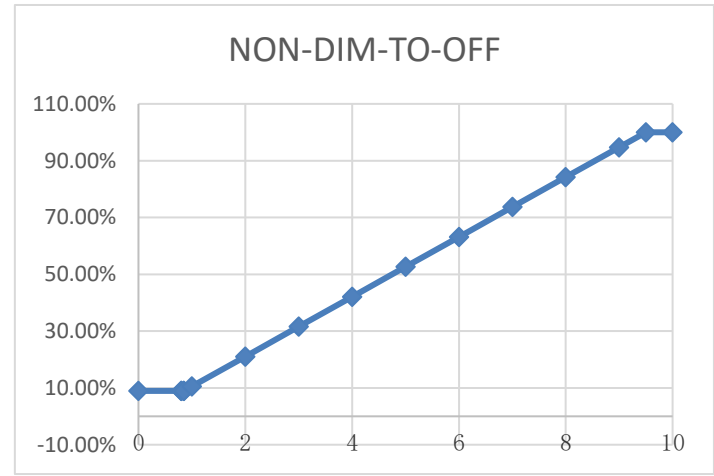
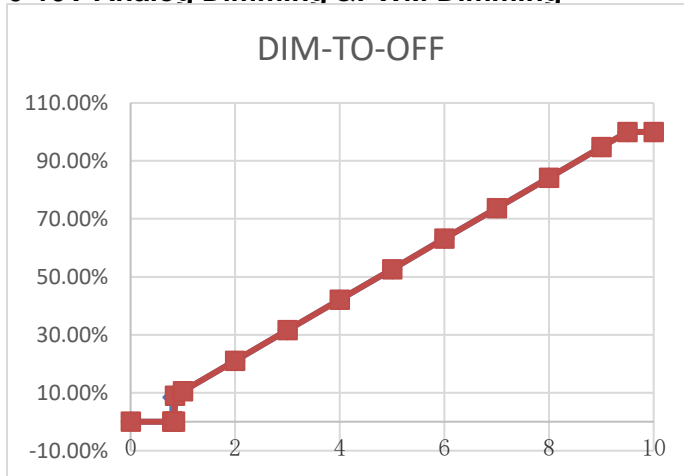


### NOTE:

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.  $I_o$  is actual output current and  $I_r$  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.

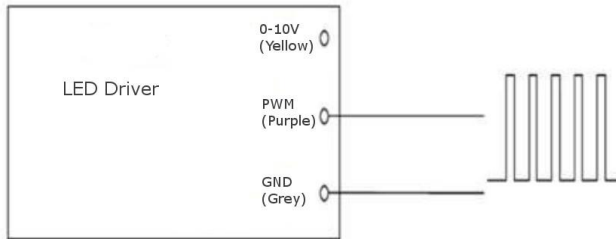
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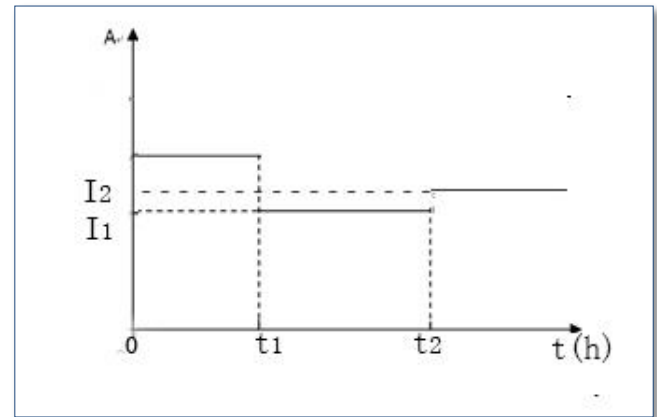
#### PWM Dimming



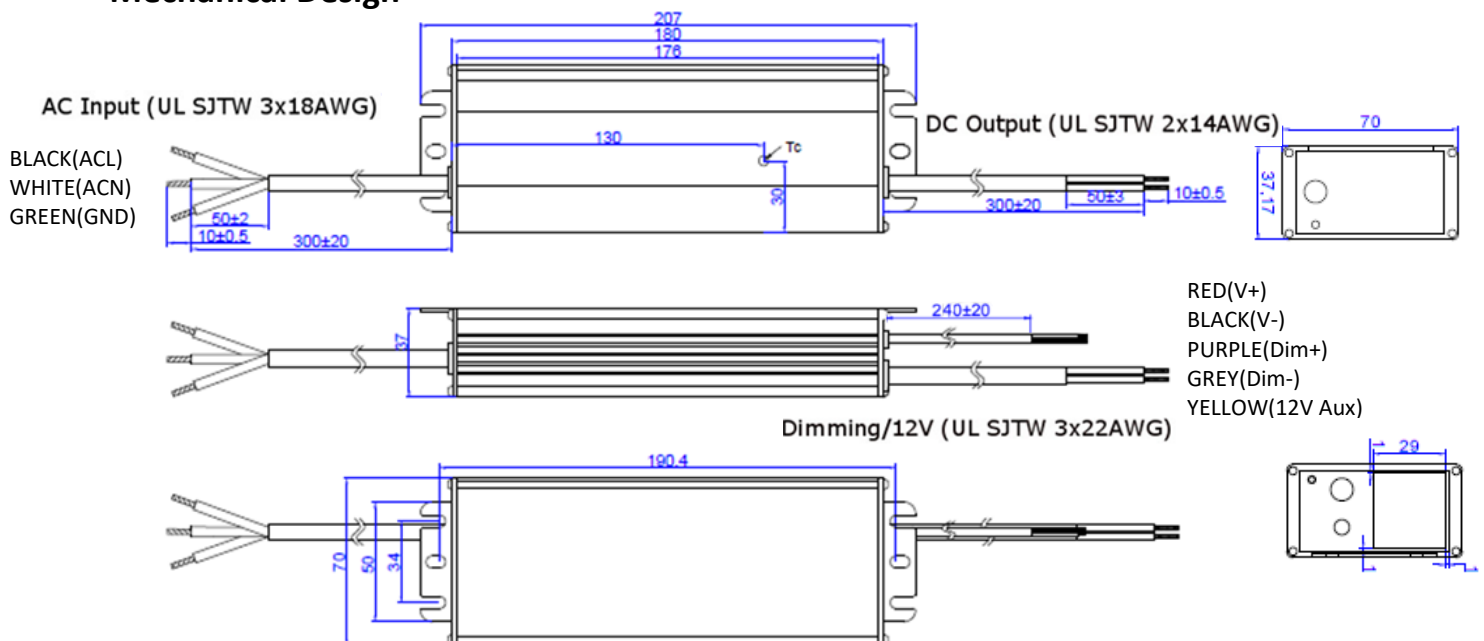
#### TIMER Dimming

##### 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



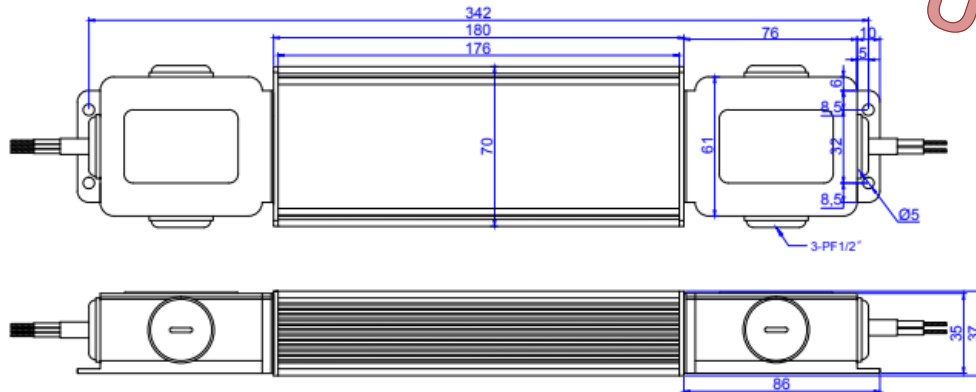
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■ **Mechanical Design J-Box**



**UL PENDING**

**Part Number Scheme**

**L2 W C P 120 S XXX S T -XYZ**

-XYZ=Programming and dimming options. \*See ordering options table on page 1.

T=Class I, 3 Wire Input

S=Metal case

XXX=Rated Current  
Ex.) 086=860mA  
500=5000mA

S=Single Output

L2=LED Driver Series

W=Input Voltage 120-277

C=Constant Power

P=Programmable

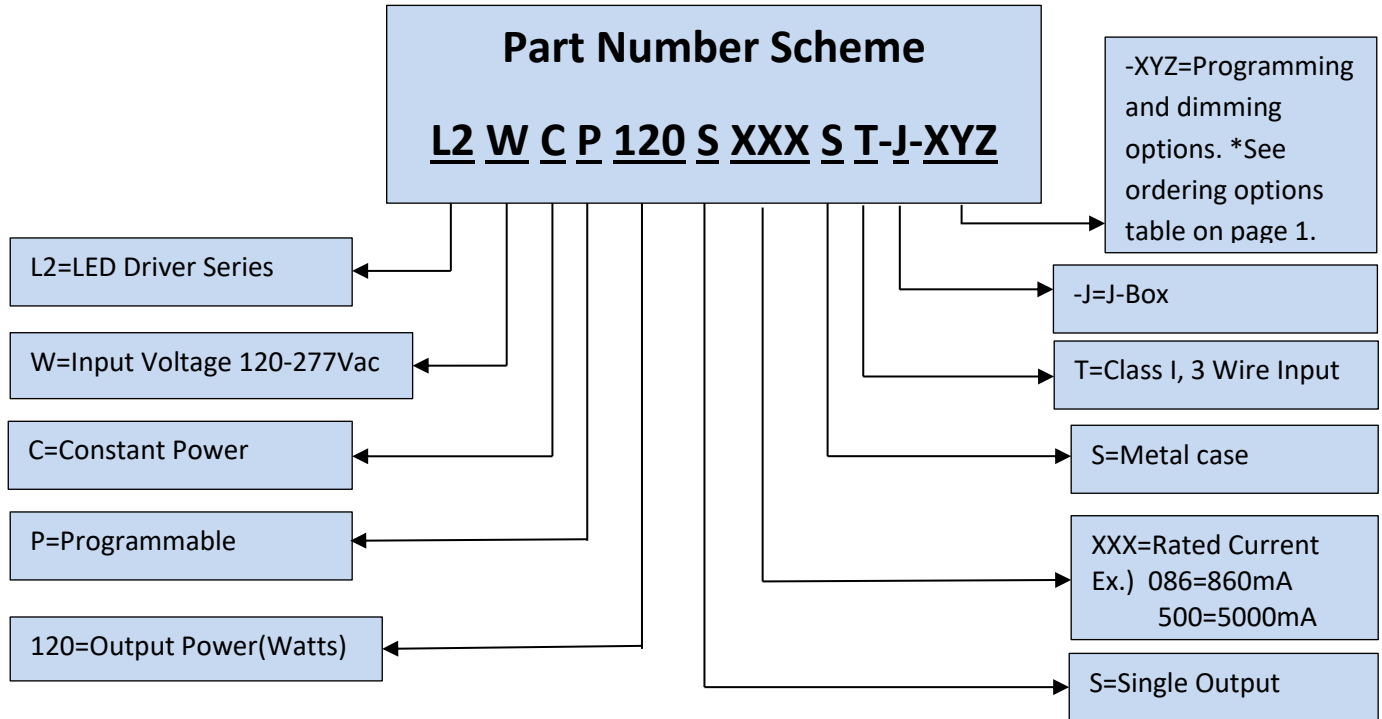
120=Output Power(Watts)

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