L2WCP012 Series

12W, 120-277Vac Input, Programmable Constant Current LED Driver

RoHS Compliant

*Near Field Communication controller

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

Features

- Power Rating: 12W
- Input Voltage: 120-277Vac
- Constant current design
- Output current (200mA-1500mA)
- Output current programmable with Near Field Communication controller
- Efficiency up to 83%
- 0-10V, PWM, Timer dimming options.
- Dim-to-off(optional)
- Dimming 5-100%, 12VAUX
- UL Class P, Type HL, Type TL, Class 2 Output
- Lightning, OVP, SCP, OTP, & Over Current Protection
- IP66
- 5-year warranty
- Surge Protection: Diff: 2kV, Common: 2kV

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 110/220V	Certification
L2WCP012S150PS-WWXYZ	120-277Vac	12W	5-15V	600mA	1500mA	80%/82%	UL/cUL
L2WCP012S050PS-WWXYZ	120-277Vac	12W	15-45V	200mA	500mA	81%/83%	UL/cUL

***Contact the factory to enable Dim-to-off feature**

Ordering options		
WW=Case Shape	**XY= Programmable**	**Z=Dimming**
PU=Puck Case	**FC**=Near Field Communication	**D**=DALI Dimming
RE=Rectangular Case		
SQ=Square 2 Gang Case		**B**=BLE Dimming

Technical Data

Input voltage range	120-277Vac
Frequency	50/60Hz
Power factor	> 0.99 @115Vac & 80~100% Full load, > 0.95 @230Vac & 80~100% Full load
Output voltage	5-45V
Output power	12W
Ripple and Noise	2.0%Vo
Max input current	0.13A

■ Technical Data(cont.)

Max input Power	12W
Efficiency	86%
Line Regulation	±5%
Load Regulation	±3%
Inrush Current	65A @ 230Vac cold start +25℃
Dimming	0~10V/ PWM/ Timer, Dim-to-off Dimming Options
Dimming Range	5~100%
THD	< 20% @120/277Vac & 80~100% load condition
Current Programmable	Yes
Output Current Programmable Range	100-1500mA
Over Current Protection	95%-108% 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
Operating Humidity	10 ~ 100% RH non-condensing
Storage Temp., Humidity	-40 ~ +85℃, 5 ~ 100% RH
Temp. Coefficient	±0.05%℃ (0~50℃)
MTBF	50,000 Hours
Dimensions	58x87.5x30 mm (2.28x3.44x1.18 in)
Mounting length	67mm (2.63 in)
Vibration	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
Packing	63pcs/carton
Weight	260.0g

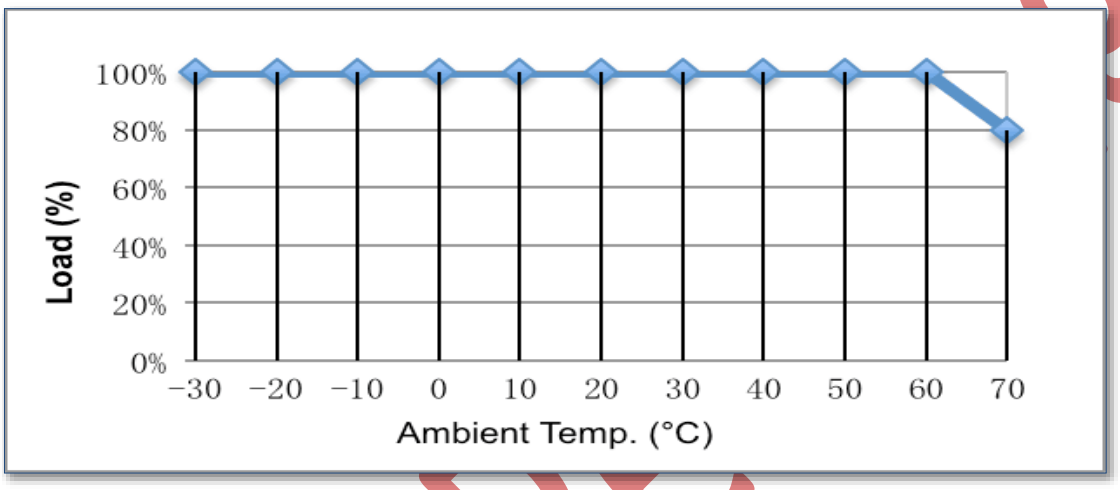
■ Safety Compliance

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℃ / 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

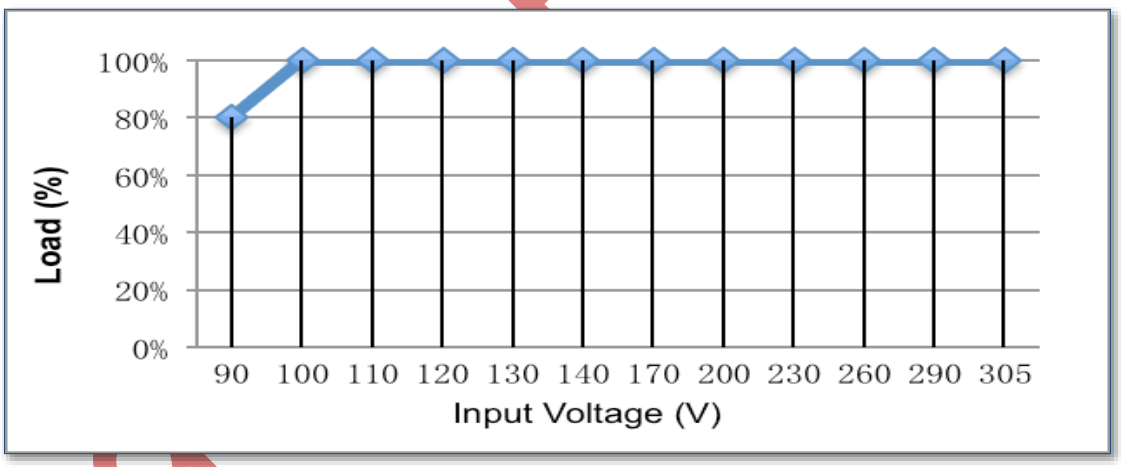
Disclaimer:

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.

■ Derating curve



■ Static Characteristics



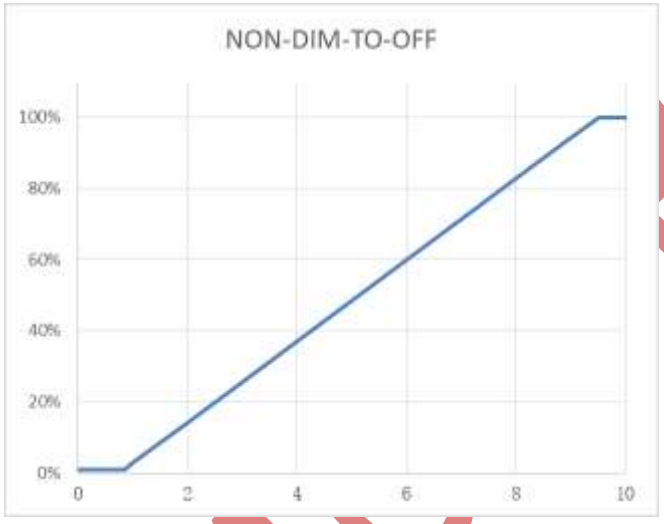
■ Near Field Communication Controller

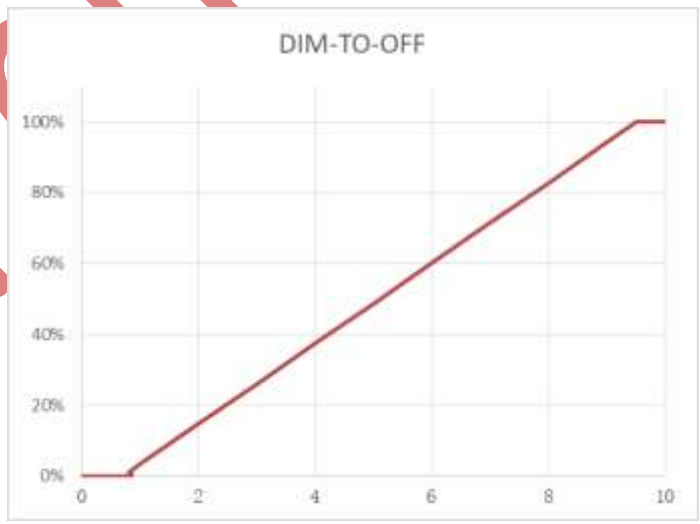
NOTE:

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



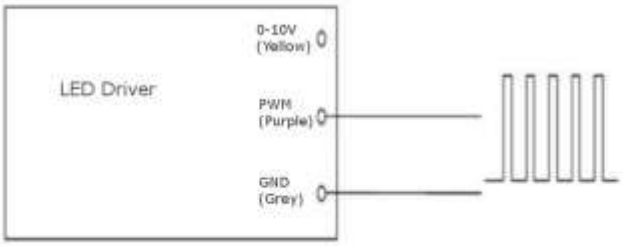


DIM -	Grey
Dimming wire 0-10V &PWM	Purple
12V AUX	Yellow
Input Dimming Voltage	0-10V
DIM+ Source Current	0-1mA
12V AUX Source Current	20mA
PWM Frequency Range	1-10KHZ
PWM high level	10V

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.

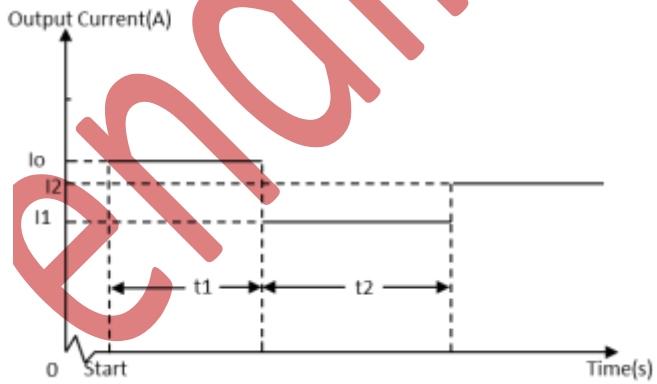
PWM Dimming



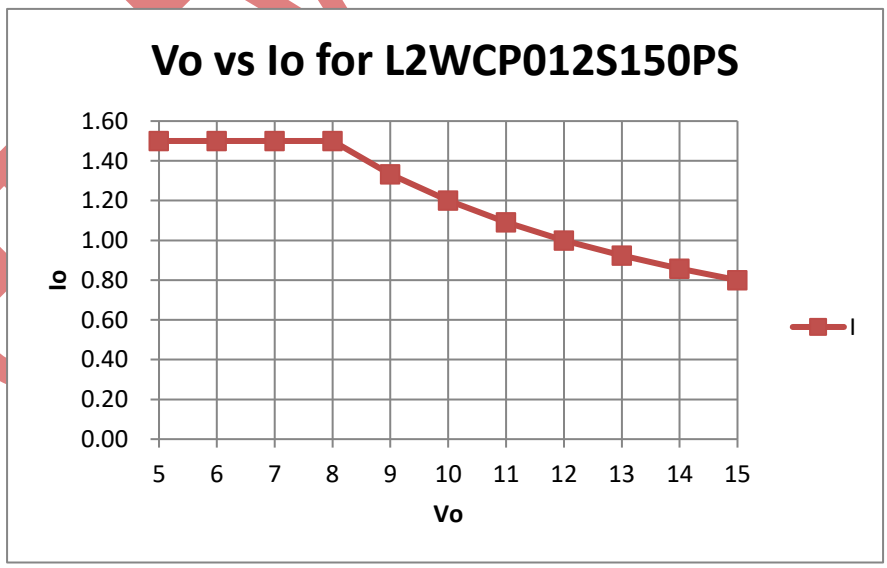
TIMER Dimming

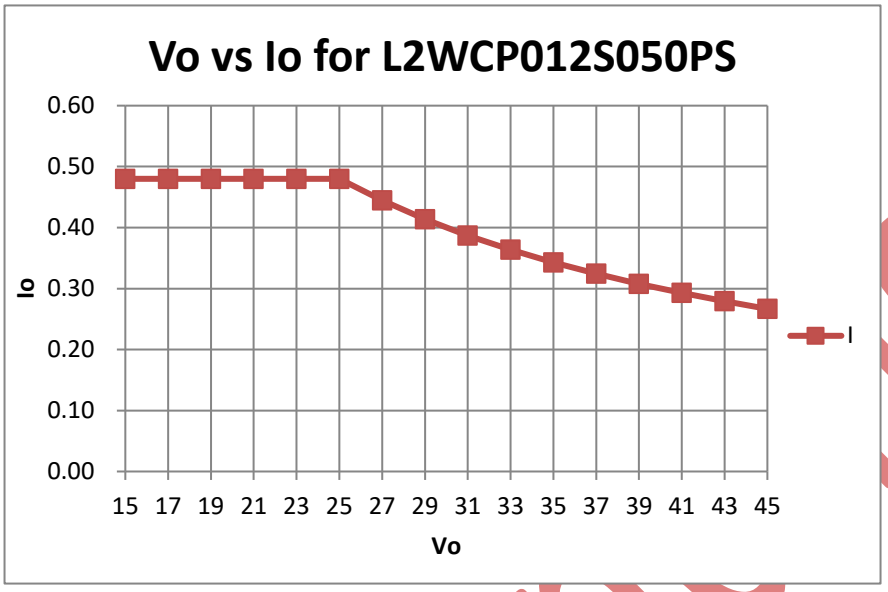
NOTE:

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.

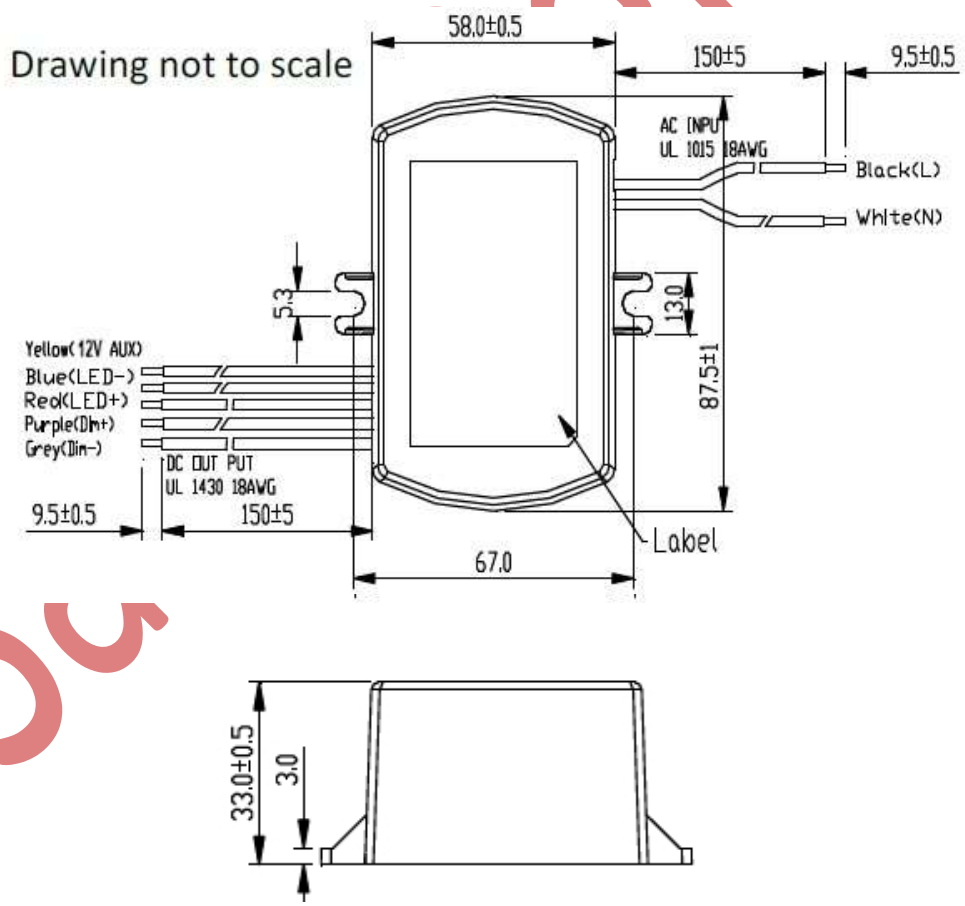


■ Vo vs Io



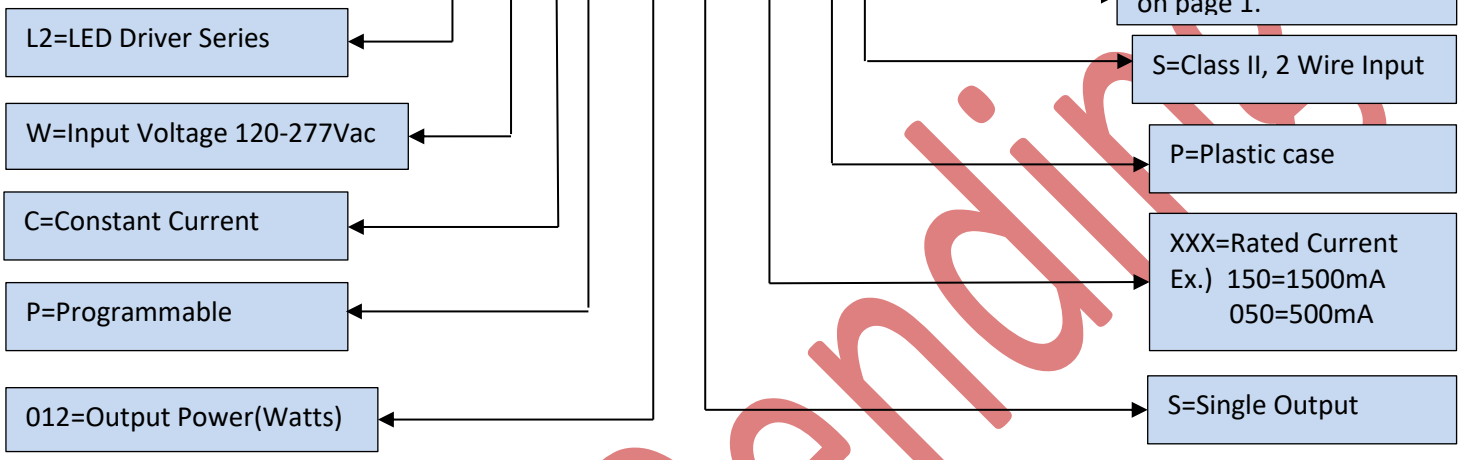


■ Mechanical Design



Part Number Scheme

L2 W C P 012 S XXX P S -WWXYZ



***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.**