

■ Features

Autec's oneDriver Series



- Supply Voltage: 90-305Vac
- Efficiency up to 90%
- Optional dimming function: 0-10V, PWM, Resistor, Timing / Dim-to-off
- IP67 rated; Suitable for Dry, Damp and Wet Locations
- Protections: SCP, OTP, OVP
- Metal case with full potted for hazardous location use
- Surge Protection: L/N-PE: 6KV, L-N 4KV
- Class 2 / Selectable Output Switch
- 5 years warranty
- Major World Safeties all in one Driver: **UL/CCC/TUV/BIS/SAA/CE**

■ Applications

L3WCP096 series are constant current LED driver with input voltage 90-305Vac and high power factor. They are specifically designed for high bays with dim to off, low standby power, high efficiency, compact housing and good thermal management, which greatly enhance the reliability and lifespan. Comprehensive protections, including Over Voltage Protection, Short Circuit Protection and Over Temperature Protection, ensure proper functioning

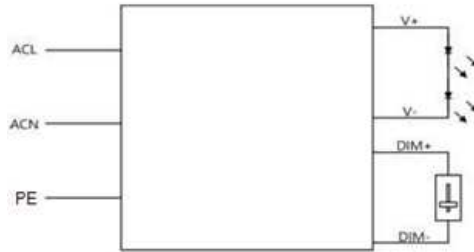
■ Model List

Model	O/P Voltage	O/P Current	Max. O/p Power	O/P Current Tolerance	THD (Typ.)	PF (Typ.)	Efficiency (Typ.)
L3WCP096S310ST	24-42V	1.8-3.1A	96W	+/- 5%	8%	0.98	90.5%
L3WCP096S240ST	32-58V	1.3-2.4A	96W	+/- 5%	8%	0.98	91.5%

Note:

1. Default Tested at 347Vac, full load, Ta 25°C.
- 2- With 3-in-1 dimming (0-10V, PWM, Resistor);
- 3- Optional model with timing control.

■ Wiring Diagram / Dimming



■ Input Characteristics

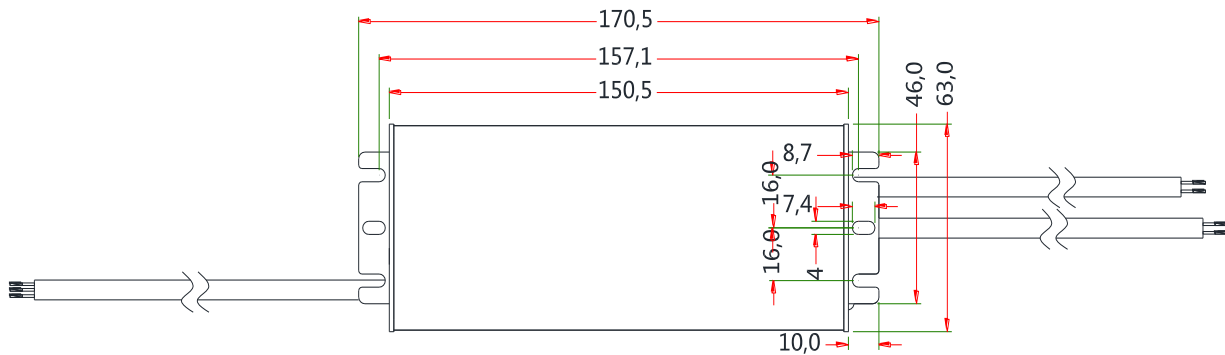
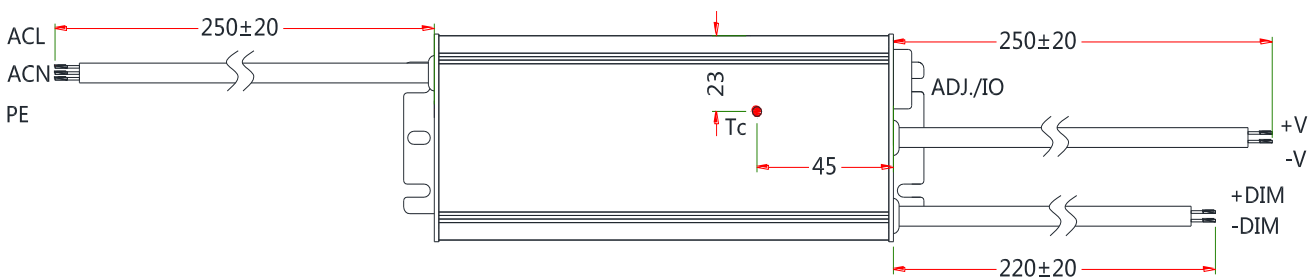
Parameter	Min	Typ.	Max	Remarks
Rated AC input range	100 Vac		277 Vac	
AC input range	90 Vac		305 Vac	
Input frequency range	47Hz		63Hz	
Max input current			1.4A	90Vac, full load
Inrush current			60A	230Vac/50Hz, cold start
No load power		0.5W	1W	277Vac/50Hz, No load
AC input OVP	320Vac	330Vac	340Vac	
Power factor	0.93	0.95		230Vac/50Hz, full load
	0.9			100-277Vac/50Hz, 70-100% Load
THD		8%	10%	230Vac/50Hz, full load
			20%	100-277Vac/50Hz, 70-100% Load

■ Safety Compliance

Certification		Standard	Status	Remark
UL/CUL		UL8750	✓	
TUV		EN 61347-2-13:2014 EN61347-1:2008+A1:2011+A2:2013 EN62493:2015		Pending
SAA		AS/NZS61347.2.13		Pending
BIS		IS15885:2012 Part 2 Sec 13		Pending
CCC		GB 19510.14-2009		Pending
CE		EN 61347-2-13:2014 EN61347-1:2008+A1:2011+A2:2013	✓	
Item		Standard	Remark	
Insulation strength	Input-output	3200Vac/5mA Max/60s	Reinforced insulation	
	Primary-Earth	1600Vac/5mA Max/60s	Basic insulation	
	Sec.- Earth	1000Vac/5mA Max/60s	Function insulation	
Insulation resistance	Input-output	≥10 MΩ	Testing Voltage: 500Vdc	
Ground resistor		≤0.1 Ω	25A/1min	
Leakage current		≤0.75mA	277Vac	
Item		Criterion	Remark	
Conduction Emission		EN55015:2013+A1:2015		

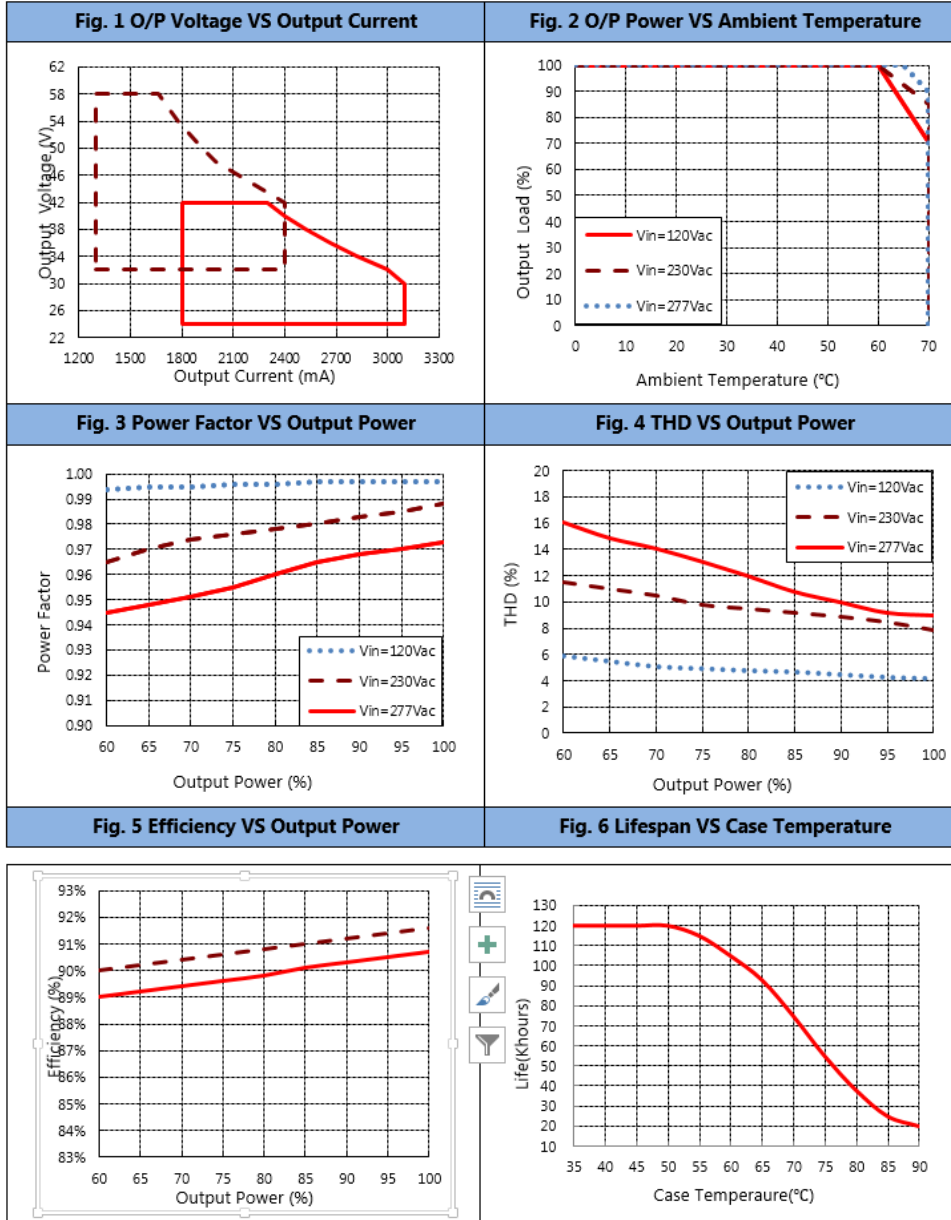
Radiation Emission	EN55015:2013+A1:2015	
Harmonic Current Emissions	IEC/EN 61000-3-2	Class C
Surge	IEC/EN61000-4-5	Difference mode 4KV, Common mode 6KV Criterion B

■ Mechanical Design



Input Wire: UL STW #18AWG, 3 X 0.824MM<sup>2</sup>, O.D. 9MM, GREEN: PE, BLACK: L, WHITE: N  
 Output Wire: UL SJTW #14AWG 2X2.08MM<sup>2</sup>, O.D. 9MM, RED: V+, BLACK: V-  
 Dim Wire: STYLE 2733, #22AWG O.D. 5.0MM, PURPLE: DIM+, GRAY: DIM-

**Performance Curves:**



■ Dimming:

0-10V Dimming (Typ.)

Voltage Range	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Rated current percentage	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%-108%

PWM duty	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Rated current percentage	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%-108%

Resistor(Typ.)

Resistor	10KΩ	20KΩ	30KΩ	40KΩ	50KΩ	60KΩ	70KΩ	80KΩ	90KΩ	100KΩ	OPEN
Rated current percentage	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%-108%

