Compliant



### 10.5-16.8W, 120~277Vac Input, Constant Current LED Driver

#### **Features**

• Power Rating: 10.5-16.8W • Input Voltage: 120-277Vac

• Constant current design

• Fixed output current(250mA-400mA)

• Efficiency to 87%

• 0-10V Dimming

SCP, and OVP

• UL Class P / Class 2

IP65

• 5-year warranty

# **■** Application

- Indoor or outdoor lights
- Dry and damp locations

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

# ■ 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 120/277Vac	Certification
L6WCD016S025PS	120~277Vac	10.5W	24-42V	250mA	250mA	85%/84%	UL/cUL
L6WCD016S030PS	120~277Vac	12.6W	24-42V	300mA	300mA	85%/85%	UL/cUL
L6WCD016S035PS	120~277Vac	14.7W	24-42V	350mA	350mA	86%/85%	UL/cUL
L6WCD016S040PS	120~277Vac	16.8W	24-42V	400mA	400mA	87%/86%	UL/cUL

#### **■** Technical Data

Input voltage range	120~277Vac					
Input current	<0.2A					
Input Frequency	47-63Hz					
Turn on delay time	≤500ms					
No-load power consumption	≤1W					
Inrush current	<50A					
Power Factor	≥0.9					
THD	≤20%					
Short Circuit Protection	Hiccup mode; No damage will occur to the driver and will be restored when fault condition is removed					
Over Voltage Protection	50V; Hiccup mode; No damage will occur to the driver and will be restored when fault condition is removed					
Output ripple(peak to peak)	<4V Note 1					
Leakage current	<0.75mA					
MTBF	200,000 hours at 25°C ambient temperature					



### ■ Technical Data(cont.)

Operation temperature	-40°C to 40°C
Storage Temperature	-40°C to 85°C
Humidity	10% to 90%
Case size	95x40x25.4mm
Packing	216pcs/carton

<sup>1.</sup> Note: 10% of nominal output voltage, measured at 20MHz bandwidth with 0.1uF ceramic capacitor in parallel with 10uF electrolytic capacitor connected at the end of the output connector.

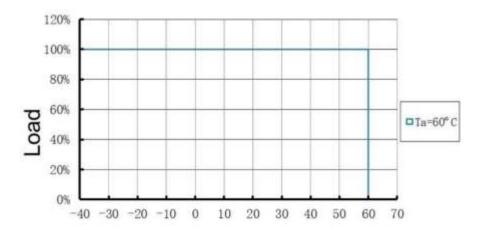
# Safety Compliance

Safety Standards	UL8750/CAN/CSA-C22.2 NO. 250.13
EMC	EN55015 and FCC part 15 class B
Hi-Pot	I/P-O/P: 1.6KVac, 5mA, 60S
	I/P-FG: 1.5KVac, 5mA, 60S
	O/P-FG: 1.5KVac, 5mA, 60S
Lightning surge	IEC61000-4-5; L-N: 500V
Insulation Resistance	I/P-O/P; O/P-FG; I/P-FG; 100Mohm/500Vdc

#### 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.

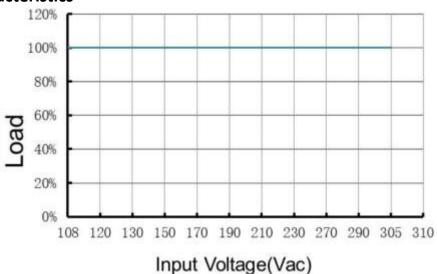
# Derating curve



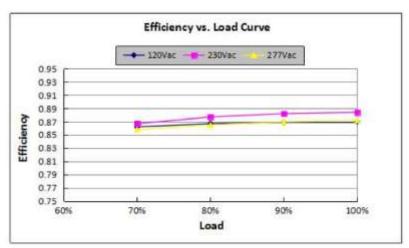
Ta VS Load

	-40°C	-25°C	0°C	25°C	45°C	60°C
120V	100%	100%	100%	100%	100%	100%
277V	100%	100%	100%	100%	100%	100%

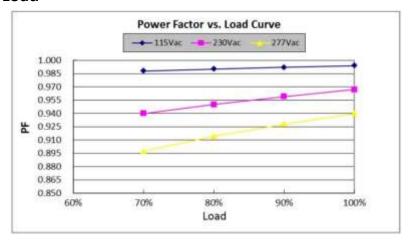
# Static characteristics



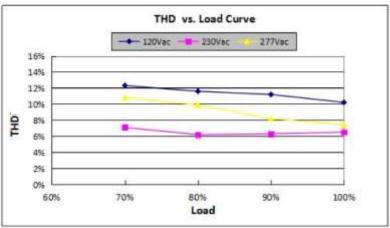
# **■** Efficiency vs Load



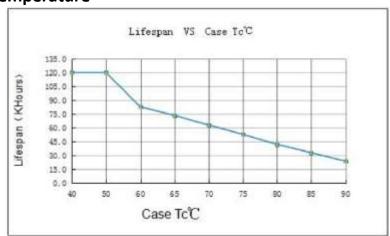
#### ■ Power Factor vs Load



#### THD vs Load

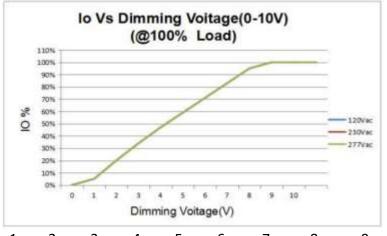


# ■ Lifetime vs Case Temperature



Case Temperature	50°C	60°C	65°C	70°C	75°C	80°C	85°C	90°C
Lifetime(Khours)	120	82.8	73.6	63	53	42	33	23.8

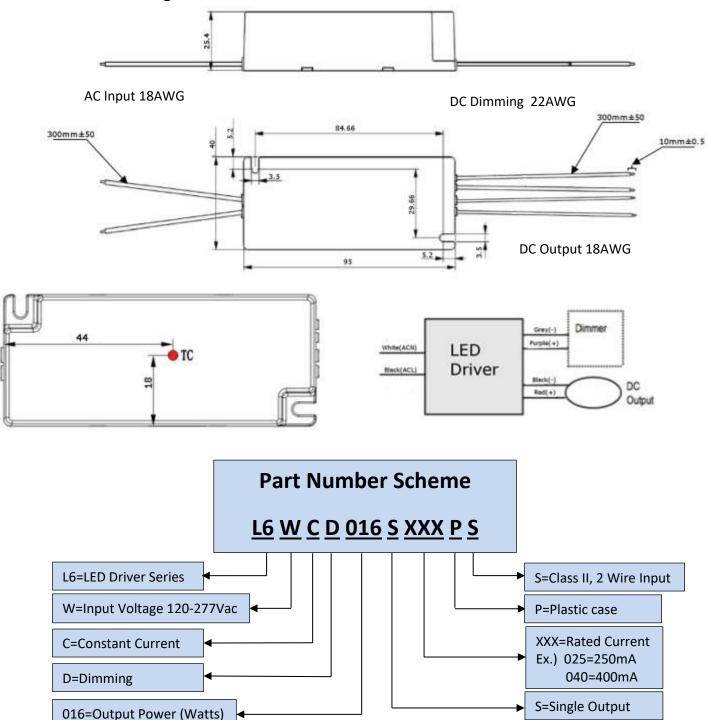
# **Dimming Function**



**Dimming Voltage** 4 5 6 7 8 9 10 **OPEN** 0 1 2 3 5% Percentage of Current 0% 20% 34% 47% 59% 71% 80% 95% 100% 100% 95-105%



# ■ Mechanical Diagram



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

<sup>\*</sup>Specifications are subject to change without notice. Autec is not responsible for issues arising from errors or omissions.