



## **Product Specification Sheet**

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**Part Type : LED driver**

**Description : XX(18-50 W) -IYYYY(400-1400mA)**

**0-10V Dimmable**

**Part Number : SLI XX-IYYYY 120-277 W D1 P**

### **1. Input Requirement**

**1.1 Input Voltage**

The nominal input voltage is 120-277VAC  
Operating Range: 108-305VAC

**1.2 Frequency**

The nominal input frequency is 50Hz/60Hz

**1.3 Current**

The maximum input current is 0.6 Amp at 120Vac at max output load of 1400mA.

**1.4 Efficiency**

The typical efficiency (watts out / watts in) is 85.5% @120V  
and 87.5% @277V with rated load.

**1.5 Power Factor**

@ 277VAC, >0.9  
@ 120VAC, >0.95

**1.6 Inrush Current**

120VAC @ 25 DEG C: <35Amp peak

**1.7 THD**

THD: < 15% @ 25oC 120-277VAC, full load (w/o Dimmer)

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## 2. Output Requirements

### 2.1 Output Current Setting

Set nominal current at this voltage.

Output	Voltage	Current	Tolerance
25W	Max 50VDC	500mA	+/- 5%
35W	Max 50VDC	700mA	+/- 5%
40W	Max 38VDC	1050mA	+/- 5%
50W	Max 36VDC	1400mA	+/- 5%

### 2.2 Output Voltage Range

Driver must work at these voltages.

Output	Voltage	Current	Tolerance
25W	50VDC	500mA	+/- 5%
35W	50VDC	700mA	+/- 5%
40W	38VDC	1050mA	+/- 5%
50W	36VDC	1400mA	+/- 5%

### 2.3 Output Line Regulation

With output clamped to below set points, vary input from 108-305VAC.

Output	Voltage Set Point	Current range
25W	50VDC	475 – 525mA
35W	50VDC	665 – 735mA
40W	38VDC	997– 1103mA
50W	36VDC	1330 –1470mA

### 2.4 Current Stability

+/- 5% maximum after 8 hours

### 2.5 Max Rated Output Load

Output	Voltage	Current range
25W	50VDC	500mA
35W	50VDC	700mA
40W	38VDC	1050mA
50W	36VDC	1400mA

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## 2.6 Ripple Factor

Measured at max rated load and electronic load connecting to the output is set as below :  $V_d=36V, I_o=1400mA, R_d=0.12$ (It is better to use lamp load)

Ripple factor  $< 8\%$  ( $I_{pk-pk}/2/I_{mean}$ ).

## 2.7 No Load Voltage

Not to exceed  $< 58VDC$ .

## 2.8 Turn on Delay

Measured @ 108-305VAC max rated load:  $< 0.75 S$

# 3. Protection Requirement

## 3.1 Short circuit protection:

When operating under any line condition into a short circuit condition for an indefinite period of time, the power supply shall be self recovering when fault condition is removed.

## 3.2 Over-current protection:

When operating under any line condition into any over load condition for an indefinite period of time, the power supply shall be self recovering when fault condition is removed.

# 4. Environmental Conditions

## 4.1 Operating

The power supply shall be capable of operating continuously in any mode without performance deterioration in the following environmental conditions:

### 4.11 Ambient Temperature:

-20 to 55 Deg C. 100% rated power at 55 Deg C.

### 4.12 Case Temperature & Class P

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**4.13 Relative Humidity:**  
5 to 95%, non-condensing

**4.14 Cooling:**  
Convection

**4.2 Non-Operating**

The power supply shall be capable of standing the following environmental conditions extended periods of time, without sustaining electrical or mechanical damage and subsequent operational deficiencies.

**4.2.1 Ambient Temperature:**  
-40 to 85 Deg C.

**4.3 Shock & Vibration:**

MIL-STD-810G Shock Method 516.6 procedure IV and Vibration Method 514.6 Procedure I, Category 4

## **5. Reliability**

**5.1 MTBF**

>300,000hrs calculated to MIL-HDBK217F @ 25 DEG C. rated load.  
Ground Benign.

**5.2 Product Life**

50000Hrs @ Tc= 90 Deg C, rated load.

## **6. EMC**

**6.1 Conducted:**

FCC Part 15 Class B@120V  
FCC Part 15 Class A@277V

**6.2 Audible Noise:**

Class A sound rating not to exceed 24dBA (audible) when installed in fixture and such fixture is installed in its normal use. The measurement is to be made from a distance not less than 3 feet.

**6.3 ESD:**

IEC 61000-4-2 Level 2: 4KV Air and Contact.

**6.4 Input Transient Protection**

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Power supply shall comply with IEEE C.62.41-2002, Class A operation.  
The line transient shall consist of seven strikes of a 100 kHz ring wave,  
2.5 kV level for both common mode and differential mode.

## **7. Safety**

### **7.1 Agency Approvals**

UL 8750-LED equipment for use in lighting product

UL1310-CLASS 2 Power units

CSA C22.2 No. 250.13-12-LED equipment for lighting applications

## **8. Dimmable**

### **8.1 0-10V Dimming**

0-10V Input Signal: 0-10V

Dimming Range:5-100%

### **8.2 PWM Dimming(10V)**

### **8.3 Resistor Dimming**

### **8.4 Isolated dimming**

## **9. Mechanical**

### **9.1 Materials**

Metal case

All material to be ROHS compliant to Directive (EU) 2015/863

Wires to be Stranded with UL approval

Input: Black & White : 260mm , 18AWG 105°C 600V Stranded wire

Output: Red & Black : 310mm , 18AWG 105°C 600V Stranded wire

Dimming: Purple & Gray:500mm , 18AWG 105°C 600V Stranded wire

Tolerance:  $\pm 1$  Inch

### **9.2 Size and shape:**

