



Product Specification Sheet

Part Type : **LED driver**

Description : **XX(22-60) W-YYYY(400-1700)mA**
Constant Current
0-10V Dimmable

Part Number : **SL XX-IYYYY 120-277 W D1 M**

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 0.61 Amp at 120Vac at max output load of 60W

1.4 Efficiency

The typical efficiency (watts out / watts in) is 85% @120V
and 87% @277V with rated load.

1.5 Power Factor

@ 277VAC, >0.95at max output load
@ 120VAC, >0.98at max output load

1.6 Inrush Current

@120VAC @ 25 DEG C: <60Amp peak

1.7 Total Harmonic Distortion

@ 277VAC, <15%at max output load

1.8 Leakage Current

<0.5mA @277V with rated load between exposed conductive surfaces and the grounding pole of the supply circuit.

2. Output Requirements

2.1 Output Current Setting

Set nominal current at this voltage.

Output	Voltage	Current	Tolerance
30W	Max 55VDC	540mA	+/- 5%
30W	Max 46VDC	650mA	+/- 5%
30W	Max 40VDC	750mA	+/- 5%
40W	Max 53VDC	750mA	+/- 5%
40W	Max 38VDC	1050mA	+/- 5%
50W	Max 43VDC	1150mA	+/- 5%
50W	Max 36VDC	1400mA	+/- 5%
60W	Max 36VDC	1600mA	+/- 5%

2.2 Output Voltage Range

Driver must work at these voltages.

Output	Voltage	Current	Tolerance
30W	22-38VDC	540mA	+/- 5%
30W	30-46VDC	650mA	+/- 5%
30W	24-40VDC	750mA	+/- 5%
40W	30-53VDC	750mA	+/- 5%
40W	22-38VDC	1050mA	+/- 5%
50W	26-43VDC	1150mA	+/- 5%
50W	21-36VDC	1400mA	+/- 5%
60W	21-36VDC	1600mA	+/- 5%

2.3 Output Line Regulation

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

Output	Voltage Set Point	Current range
30W	38VDC	513-567mA
30W	46VDC	617-682mA
30W	40VDC	712-787mA
40W	53VDC	712-787mA
40W	38VDC	997-1102mA
50W	43VDC	1092-1207mA
50W	36VDC	1330-1470mA
50W	36VDC	1520-1680mA

2.4 Current Stability

+/- 2% maximum after 8 hours

2.5 Max Rated Output Load

Output	Voltage	Current range
30W	55VDC	540mA
30W	46VDC	650mA
30W	40VDC	750mA
40W	53VDC	750mA
40W	38VDC	1050mA
50W	43VDC	1150mA
50W	36VDC	1400mA
50W	36VDC	1600mA

2.6 Ripple Factor

Measured at max rated load and electronic load connecting to the output is set as below : $V_d=38V$ $R_d=0.08$

Ripple factor < 5% ($I_{pk-pk}/2/I_{mean}$).

2.7 No Load Voltage

Not to exceed 60VDC.

2.8 Turn on Delay

Measured @ 120VAC max rated load: < 0.5 second.

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 55Deg C. 100% rated power at 55Deg C.

4.12 Case Temperature&Class P

Tc.:90°C @Ta.:55 Deg C

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.

0.5%failure@1Yr @55Deg C. ambient,full load.

5.2 Product Life

>5yrs @ 55 Deg C. ambient, rated load.

6. EMC

6.1 Conducted:

FCC Part 15Class A

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

Power supply shall comply with IEEE C.62.41-1991, 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

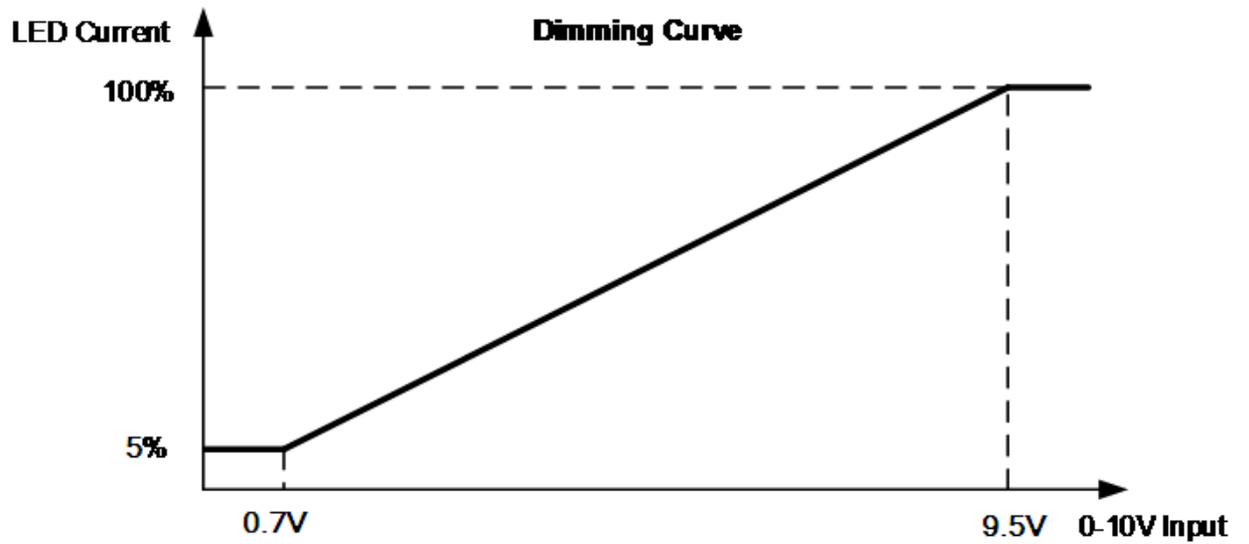
8. Dimmable

8.1 0-10V Dimming:

0-10V Input Signal: 0-10V

Dimming Range:5-100%

8.2 Dimming Curve:



9. Mechanical

9.1 Materials

Metal case

All material to be ROHs compliant to Directive 2002/95/EC

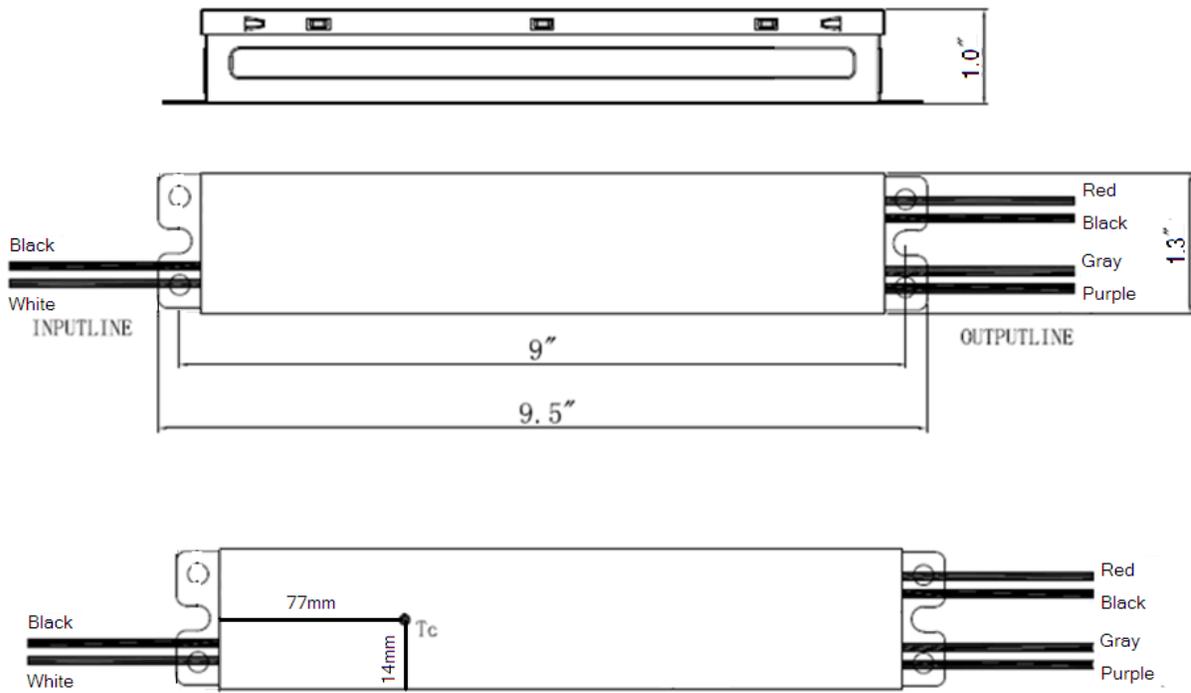
Wires to be Stranded with UL approval

Input: Black & White Stranded Line: 300mm, 18AWG

Output: Red & Black Stranded Line: 300mm, 18AWG

Dimming: Purple & Gray Stranded Line: 260mm, 18AWG

9.2 Size and shape:



9.3 Weight:

0.43kg/pc