ARCATA ELECTRONICS INC.

Product Specification Sheet

Part Type : LED driver

Description : XX(19-50)W YYYY(400-1800)mA Constant Current

0-10V Dimmable

Part Number : SLE 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 0.5 Amp at 120Vac at max output load of 50W.

1.4 Efficiency
The typical efficiency (watts out / watts in) is 86% @120V 50W and 88% @277V 50W with rated load.

1.5 Power Factor
@ 277VAC, >0.95
@ 120VAC, >0.98

1.6 Inrush Current
120VAC @ 25 DEG C: <50Amp peak

1.7 THD
THD: < 20% @ 25oC 108-305VAC, full load (w/o Dimmer)

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
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	30-50VDC	500mA	+/- 5%
35W	30-50VDC	700mA	+/- 5%
40W	21-38VDC	1050mA	+/- 5%
50W	21-36VDC	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 – 1102mA
50W	36VDC	1330 – 1470mA

2.4 Current Stability

+/- 1.5% 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

2.6 Ripple Factor

Measured at max rated load and electronic load connecting to the output is ser as below : Vd=50V Rd=0.08

Ripple factor<20% (Ipk-pk/2/Imean).

2.7 No Load Voltage

Not to exceed 60VDC.

2.8 Turn on Delay

Measured @ 108-305VAC max rated load: < 1 seconds.

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&Type TL

Tref. :90^{o}C

Tc.:68 ^{o}C @Ta.:40 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.

5.2 Product Life

>5yrs @ Tc= 90 Deg C, rated load.

6. EMC

6.1 Conducted:

FCC Part 15 Class 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

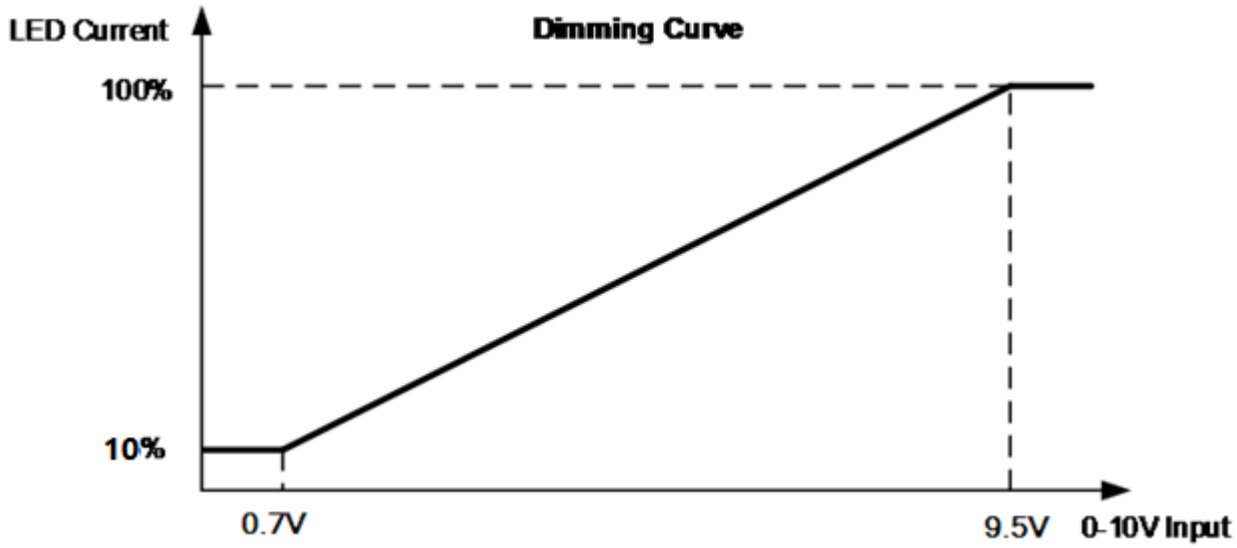
UL 8750-LED equipment for use in lighting product
UL1310-CLASS 2 Power units
CSA C22.2 No. 250.13-12-LED equipment for lighting applications

8.Dimmable

8.1 0-10V Dimming

0-10V Input Signal: 0-10V
Dimming Range:20-100%

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 : 300mm , 18AWG 105℃ 600V Solid Line
Output: Red & Blue : 300mm , 20AWG 105℃ 600V Solid Line
Dimming: Purple & Gray:260mm , 18AWG 105℃ 600V Solid Line

9.2 Size and shape: