ARCATA ELECTRONICS INC.

Product Specification Sheet

Part Type : LED driver

Description :XX(18-40) W-YYYY(350-1400)mA Constant Current

Part Number :SLCXX-IYYYY 120-277 W R

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 0.47 Amp at 120Vac at max output load of 40W

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

1.5 Power Factor
@ 277VAC, >0.90
@ 120VAC, >0.98

1.6 Inrush Current
120VAC @ 25 DEG C: <40Amp peak

1.7 Total Harmonic Distortion
@ 277VAC, <10%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.

1. Output Requirements

2.1 Output Current Setting

Set nominal current at this voltage.

Output	Voltage	Current	Tolerance
18W	Max 58VDC	350mA	+/- 5%
20W	Max 45VDC	500mA	+/- 5%
25W	Max 55VDC	500mA	+/- 5%
33W	Max 40VDC	1050mA	+/- 5%
40W	Max 45VDC	1050mA	+/- 5%
40W	Max 35VDC	1400mA	+/- 5%

2.2 Output Voltage Range

Driver must work at these voltages.

Output	Voltage	Current	Tolerance
18W	30-52VDC	350mA	+/- 5%
20W	20-40VDC	500mA	+/- 5%
25W	22-50VDC	500mA	+/- 5%
33W	16-32VDC	1050mA	+/- 5%
40W	20-38VDC	1050mA	+/- 5%
40W	16-28VDC	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
18W	52VDC	333-367mA
20W	40VDC	475- 525mA
25W	50VDC	475- 525mA
33W	32VDC	998- 1102mA
40W	38VDC	998- 1102mA
40W	28VDC	1330- 1470mA

2.4 Current Stability

+/- 3% maximum after 8 hours

2.5 Max Rated Output Load

Output	Voltage	Current range
18W	52VDC	350mA
20W	40VDC	500mA
25W	50VDC	500mA
33W	32VDC	1050mA
40W	38VDC	1050mA
40W	28VDC	1400mA

2.6 Ripple Factor

Measured at max rated load and electronic load connecting to the output is ser as below :Vd=52V Rd=0.13
Ripple factor<20% (Ipk-pk/2/Imean).

2.7 No Load Voltage

Not toexceed60VDC.

2.8 Turn on Delay

Measured @ 120VAC max rated load: <1second.

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
Tc.:80^{o}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.

5.2 Product Life
>5yrs @ 55Deg 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

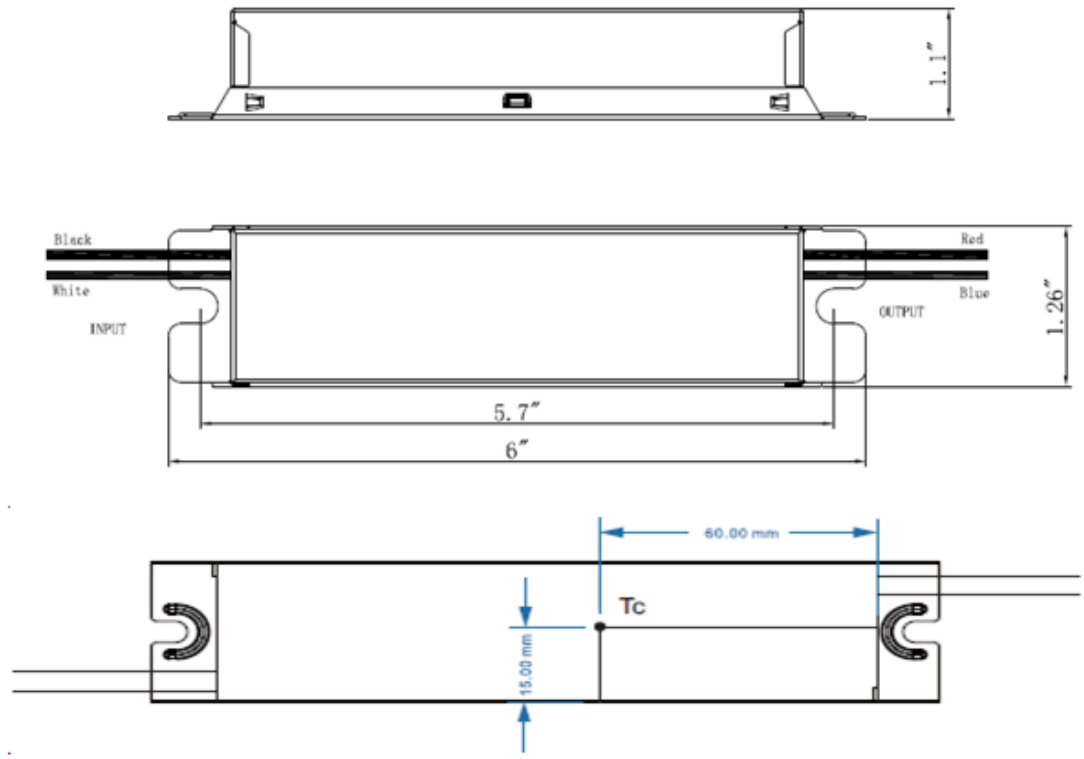
UL 8750-LED equipment for use in lighting product
UL1310-CLASS 2 Power units
CSA C22.2 No. 250.13-12-LED equipment for lighting applications

8. Mechanical

8.1 Materials

Metal case
All material to be ROHs compliant to Directive 2002/95/EC
Wires to be Strandedwith UL approval
Input: Black & White: 300mm , 18AWG 105℃ 600V
Output: Red &Black: 300mm , 20AWG 105℃ 600V

8.2 Size and shape:


1.1″
Black
White
INPUT
Red
Blue
OUTPUT
1.26″
5.7″
6″
60.00 mm
Tc
15.00 mm