



Product Specification Sheet

Part Type : **LED driver**

Description : **XX(40-65) W-YYYY(400-1700)mA**
Constant Current

Part Number : **SLCXX-IYYYY 120-277 W P**

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 0.64 Amp at 120Vac at max output load of 65W

1.4 Efficiency

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

1.5 Power Factor

@ 277VAC, >0.95
@ 120VAC, >0.98

1.6 Inrush Current

120VAC @ 25 DEG C: <50Amp 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
40W	Max 48VDC	1050mA	+/- 5%
50W	Max 58VDC	1050mA	+/- 5%
50W	Max 42VDC	1400mA	+/- 5%
63W	Max 50VDC	1400mA	+/- 5%
60W	Max 55VDC	1200mA	+/- 5%
65W	Max 50VDC	1500mA	+/- 5%

2.2 Output Voltage Range

Driver must work at these voltages.

Output	Voltage	Current	Tolerance
40W	20-38VDC	1050mA	+/- 5%
50W	30-52VDC	1050mA	+/- 5%
50W	21-36VDC	1400mA	+/- 5%
63W	20-45VDC	1400mA	+/- 5%
60W	20-50VDC	1200mA	+/- 5%
65W	20-43VDC	1500mA	+/- 5%

2.3 Output Line Regulation

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

Output	Voltage Set Point	Current range
40W	38VDC	998- 1102mA
50W	52VDC	998- 1102mA
50W	36VDC	1330 –1470mA
63W	45VDC	1330 –1470mA
60W	50VDC	1140 –1260mA
65W	43VDC	1425 –1575mA

2.4 Current Stability

+/- 1.5% maximum after 8 hours

2.5 Max Rated Output Load

Output	Voltage	Current range
40W	38VDC	1050mA
50W	52VDC	1050mA
50W	36VDC	1400mA
63W	45VDC	1400mA
60W	50VDC	1200mA
65W	43VDC	1500mA

2.6 Ripple Factor

Measured at max rated load and electronic load connecting to the output is set as below: $V_d=52V$ $R_d=0.08$
Ripple factor < 25% ($I_{pk-pk}/2/I_{mean}$).

2.7 No Load Voltage

Not to exceed 60VDC.

2.8 Turn on Delay

Measured @ 120VAC max rated load: < 1 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&Type TL

Tref. :90°C

Tc.:71°C @Ta.:40Deg 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 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. Mechanical

8.1 Materials
Metal case
All material to be ROHs compliant to Directive 2002/95/EC
Wires to be Stranded with UL approval
Input: Black & White : 240mm , 18AWG UL1316
Output: Red & Black : 290mm , 18AWG UL1015

8.2 Size and shape:

