Part Type : LED driver

Description : XX(35-80) W-YYYY(700-2100)mA Constant Current

Part Number : SLEXX-IYYYY 120-277 W S

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 0.8Amp at 120Vac at max output load of 80W

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, <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.

<table>
<thead>
<tr>
<th>Output</th>
<th>Voltage</th>
<th>Current</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>60W</td>
<td>Max 55VDC</td>
<td>1200mA</td>
<td>+/- 5%</td>
</tr>
<tr>
<td>70W</td>
<td>Max 55VDC</td>
<td>1400mA</td>
<td>+/- 5%</td>
</tr>
<tr>
<td>75W</td>
<td>Max 45VDC</td>
<td>2100mA</td>
<td>+/- 5%</td>
</tr>
<tr>
<td>80W</td>
<td>Max 45VDC</td>
<td>2100mA</td>
<td>+/- 5%</td>
</tr>
</tbody>
</table>

2.2 Output Voltage Range
Driver must work at these voltages.

<table>
<thead>
<tr>
<th>Output</th>
<th>Voltage</th>
<th>Current</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>60W</td>
<td>20-50VDC</td>
<td>1200mA</td>
<td>+/- 5%</td>
</tr>
<tr>
<td>70W</td>
<td>20-50VDC</td>
<td>1400mA</td>
<td>+/- 5%</td>
</tr>
<tr>
<td>75W</td>
<td>21-36VDC</td>
<td>2100mA</td>
<td>+/- 5%</td>
</tr>
<tr>
<td>80W</td>
<td>21-38VDC</td>
<td>2100mA</td>
<td>+/- 5%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Output</th>
<th>Voltage Set Point</th>
<th>Current range</th>
</tr>
</thead>
<tbody>
<tr>
<td>60W</td>
<td>50VDC</td>
<td>1140-1260mA</td>
</tr>
<tr>
<td>70W</td>
<td>50VDC</td>
<td>1330-1470mA</td>
</tr>
<tr>
<td>75W</td>
<td>36VDC</td>
<td>1995-2205mA</td>
</tr>
<tr>
<td>80W</td>
<td>38VDC</td>
<td>1995-2205mA</td>
</tr>
</tbody>
</table>

2.4 Current Stability
+/− 1.5% maximum after 8 hours

2.5 Max Rated Output Load

<table>
<thead>
<tr>
<th>Output</th>
<th>Voltage</th>
<th>Current range</th>
</tr>
</thead>
<tbody>
<tr>
<td>60W</td>
<td>50VDC</td>
<td>1200mA</td>
</tr>
<tr>
<td>70W</td>
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<tr>
<td>75W</td>
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<td>2100mA</td>
</tr>
<tr>
<td>80W</td>
<td>38VDC</td>
<td>2100mA</td>
</tr>
</tbody>
</table>
2.6 Ripple Factor
Measured at max rated load and electronic load connecting to the output is as below: \( V_d = 50V \) \( R_d = 0.08 \)

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: < 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
\( T_{ref} \): 90ºC
\( T_c \): 68ºC @ \( T_a \): 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 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 Stranded with UL approval
Input: Black & White : 260mm , 18AWG
Output: Red & Black : 300mm , 18AWG

8.2 Size and shape:

![Diagram of mechanical specifications]