ANP100 Series -277V
Single Output Channel, CC / CV Mode, Dimmable LED Driver

Features and Applications:
• One 100W / 75W / 60W / 40W DC Output
• Options for Standard LED Current Available: 350mA / 500mA / 700mA / 1A / 1.4A
• Highly Efficient Switching-Mode Technology
• Active Power Factor Correction
• Built For Outdoor Wet, Damp or Indoor Dry Applications
• Silicone Encapsulated For Wet Locations
• Rugged & Splash Proof Aluminum Case - IP67 Rated
• Built-in EMI Filter For Low Noise
• 0-10Vdc Dimmable Output, Optional DALI interface Available
• 12Vaux Output Available

All specifications are typical at nominal input, full load, at 25°C unless otherwise stated.

### Electrical Specifications

**INPUT**
- Input Voltage Range: 90 - 305Vac, (Rated 100 - 277Vac)
- Input Frequency: 47 - 63Hz
- Input Current: max. 1.3A@115Vac/60Hz, full load
- Inrush Current: 80A @230Vac input/60Hz, full load cold start
- Leakage Current: 0.5mA max.
- Power Factor: ≥0.9 at 65-100% load (100W)
  - (for Full Input Range) ≥0.9 at 85-100% load (75/60/40W)
- THD: <20% @ 80% load, 277Vac

**OUTPUT**
- Output Current Regulation: 5% typical / 6% @ Vout > 200V
- Efficiency: See Table 1 @ Page 2
- Short Circuit Protection: Shutdown & Auto Recovery
- Start-up Time: < 2 sec.
- Dimming Control: 0 - 10Vdc (10V for max. output)
- Optional 12Vaux Output: Available. Max Load: 0.2A

### General Specifications

**Warranty Info / MTBF**
Contact Amperor for detailed warranty and MTBF information

**Dimension (100W)**
- 160mm x 64.5mm x 38mm
- 6.30” x 2.54” x 1.50”

**Dimension (75/60/45W)**
- 130mm x 64.5mm x 38mm
- 5.12” x 2.54” x 1.50”

### Environmental Specifications

**Max. Operating Temp.**
- 90°C @ Tcase (See Page 4 for Tcase Location)

**Min. Operating Temp.**
- -30°C @ Tambient

**Thermal Protection**
- Output Drops to 50% @ 1st OTP (See Page 3 for details)
- Output shutdown @ 2nd OTP

**Storage Temp.**
- -40°C to +85°C

**Relative Humidity**
- 5% to 95% (non-Condensing)

**Enclosure**
- Outside case sealed per IP67

**Cooling**
- Conduction

**RoHS**
- Compliant

### Safety Certifications

**UL**
- UL879 (included in SAM) UL8750, UL1310 (Wet Location)
- E File#: E307120

### EMC

**Conducted Emissions**
- EN55015, FCC part 15 level B

**Radiated Emissions**
- EN55015, FCC part 15 level B

**Surge Protection**
- EN61000-4-5, Level 4
  - L-N: 2KV, L/N-PE: 4KV

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REV A2
ANP100 Series -277V

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Order the built-in dimming function by replacing -U in the model name with:
-D: with Dimming Function built-in, Blank: no Dimming Function built-in.
Example: ANP100-142P1-277-100-D indicates a 700mA, 100W output driver with dimming function built-in.
-D-D: the driver is equipped with DALI, but without the 0-10V dimming interface.

### Table1: ANP100-XXXP1-277-WWW-U Model vs. Output Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. Output Voltage (V)</th>
<th>Rated Output Current (mA)</th>
<th>Vout Range (V)</th>
<th>Max. Pout (W)</th>
<th>Min. Efficiency (115Vac input 100% load)</th>
<th>Min. Efficiency (230Vac input 100% load)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANP100-285P1-277-100</td>
<td>285</td>
<td>350</td>
<td>180 ~ 285</td>
<td>100</td>
<td>88.00%</td>
<td>90.00%</td>
</tr>
<tr>
<td>ANP100-200P1-277-100</td>
<td>182</td>
<td>550</td>
<td>120 ~ 200</td>
<td>100</td>
<td>88.00%</td>
<td>90.00%</td>
</tr>
<tr>
<td>ANP100-142P1-277-100</td>
<td>142</td>
<td>700</td>
<td>80 ~ 142</td>
<td>100</td>
<td>87.50%</td>
<td>89.50%</td>
</tr>
<tr>
<td>ANP100-095P1-277-100</td>
<td>95</td>
<td>1050</td>
<td>55 ~ 95</td>
<td>100</td>
<td>87.50%</td>
<td>89.50%</td>
</tr>
<tr>
<td>ANP100-071P1-277-100</td>
<td>71</td>
<td>1400</td>
<td>40 ~ 71</td>
<td>100</td>
<td>87.50%</td>
<td>89.50%</td>
</tr>
<tr>
<td>ANP100-107P1-277-075</td>
<td>107</td>
<td>700</td>
<td>65 ~ 107</td>
<td>75</td>
<td>87.50%</td>
<td>89.50%</td>
</tr>
<tr>
<td>ANP100-075P1-277-075</td>
<td>75</td>
<td>1000</td>
<td>45 ~ 75</td>
<td>75</td>
<td>87.50%</td>
<td>89.50%</td>
</tr>
<tr>
<td>ANP100-086P1-277-060</td>
<td>86</td>
<td>700</td>
<td>52 ~ 86</td>
<td>60</td>
<td>87.50%</td>
<td>89.50%</td>
</tr>
<tr>
<td>ANP100-060P1-277-060</td>
<td>60</td>
<td>1000</td>
<td>36 ~ 60</td>
<td>60</td>
<td>87.50%</td>
<td>89.50%</td>
</tr>
<tr>
<td>ANP100-057P1-277-040</td>
<td>57</td>
<td>700</td>
<td>35 ~ 57</td>
<td>40</td>
<td>87.50%</td>
<td>89.50%</td>
</tr>
<tr>
<td>ANP100-040P1-277-040</td>
<td>40</td>
<td>1000</td>
<td>24 ~ 40</td>
<td>40</td>
<td>87.50%</td>
<td>89.50%</td>
</tr>
</tbody>
</table>

### Notes:
Order the built-in dimming function by replacing -U in the model name with:
-D: with Dimming Function built-in, Blank: no Dimming Function built-in.
Example: ANP100-142P1-277-100-D indicates a 700mA, 100W output driver with dimming function built-in.
-D-D: the driver is equipped with DALI, but without the 0-10V dimming interface.

#### Constant Current / Constant Voltage Operation

1. If the current draw from the load is equal to the rated output current of the driver, the driver will operate in CC mode. (on the Green Line above)
2. If the current draw from the load is less than the rated output current of the driver, the driver will operate in CV mode. When working with the CV mode LED light tube / module / strip, the driver operates on the Red Line above. Please contact Amperor for detailed explanation.
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Dimming Curve

Dimming Voltage (Vdc) vs. Output Current %

OTP (Over Temperature Protection) Operation

Output Current % vs. Tcase Temperature (°C)

Note: The min. temperature the driver can operate in is -30°C (Ambient Temperature)
Note:
1. AC input cable; UL2517 18AWGX3C (White: L, Black: N, Yellow/Green: G)
2. DC output cable: UL2517 18AWGX2C (Red: +, Black: -)
3. Dimming cable (or DALI cable): UL2517 22AWGX2C (Violet: +, Gray: -)
4. All tolerance in the drawing w/o specifically mentioned is +/- 0.5