### ELECTRICAL SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Output Power</th>
<th>Input Power</th>
<th>Input Current</th>
<th>Min PF (full load)</th>
<th>Max THD (full load)</th>
<th>Output Voltage</th>
<th>Output Current</th>
<th>T case Max</th>
<th>Min Starting Temp**</th>
<th>IP Rating</th>
<th>Efficiency Up To</th>
<th>Dimming Protocol</th>
<th>Dimming Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>30W</td>
<td>35W</td>
<td>0.3@120V</td>
<td>&gt;0.90</td>
<td>&lt;20</td>
<td>14-42V</td>
<td>125mA-700mA ±15%</td>
<td>90°C</td>
<td>-40°C</td>
<td>64</td>
<td>85</td>
<td>0 to 10V</td>
<td>0 to 100%</td>
</tr>
</tbody>
</table>

** This driver can operate down to -40°C in a non-dimming condition. Below 0°C some flicker may be observed.

### PHYSICAL:

#### Dimensions

<table>
<thead>
<tr>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.22&quot;</td>
<td>1.73&quot;</td>
<td>1.22&quot;</td>
<td>5.86&quot;</td>
</tr>
</tbody>
</table>

#### Lead Lengths

- Black: 5.9"
- Blue: 5.9"
- Purple: 7.1"
- White: 5.9"
- Red: 5.9"
- Gray: 7.1"

### Protection

- **Output Voltage**: Output Current decade mode, recovers automatically after fault condition is removed
- **Short Circuit**: Hiccup mode, recovers automatically after fault condition is removed
- **Over Temp.**: Shut down o/p voltage, re-power on to recover

### Safety & EMC Environment

- **Operation Temp.**: 0°C~50°C
- **Working Humidity**: 10%~90%
- **Storage Temp., Humidity**: -40°C~80°C
- Maximum T-Case Temp.: 90°C
- **EMI/EMS**: FCC Part 15 class A, UL8750, CSA C22.2 No. 250.13-14

### Specifications

- **Model Number**: AC30CD700AP0Q
- **Input Voltage**: 120-277V
- **Input Frequency**: 50/60Hz
- **Side Mount/Leads Options**: Dims to 0%-100% By NFC Settings

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Data is based upon tests performed by AC Electronics in a controlled environment and representative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.

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**SAFETY:**

- Class P
- Class 2
- Class A sound rating
- Overload Protection
- Open/Short Circuit Protection
- LED driver has a life expectancy of 50,000 hours at Tcase of ≤75°C


**INSTALLATION:**

- Max Remote installation distance is 18 ft
- LED driver cases should be grounded
- LED drivers shall be installed inside electrical enclosures
- 18 AWG 600V/105°C tinned stranded copper lead-wires are required for installation

*AC Electronics/AC LED Power Designs warrants to the purchaser that each LED Driver will be free from defects in material or workmanship for a period of 5 years when operated at max case temp of up to 75°C; 3 years from date of manufacture when operated at a max case temp of up to 90°C when properly installed and under normal conditions of use. See aceleds.com for complete warranty policy.

**GENERAL INFORMATION**

<table>
<thead>
<tr>
<th>WARRANTY</th>
<th>5 Years TC≤75°C, 3 Years 75°C≤TC≤90°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inrush Current</td>
<td>35A</td>
</tr>
<tr>
<td>MTBF</td>
<td>10,000 Hrs Type</td>
</tr>
<tr>
<td>Protection</td>
<td>Overload/Over temperature/Short circuit protection</td>
</tr>
</tbody>
</table>

**APPROVALS**

UL Class2, FCC Class A, RoHs, Type HL

**IOUT/VOUT CURVE**


**3401 Avenue D, Arlington, TX 76011 • 800-375-6355 • www.aceleds.com**

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Performance Characteristics

Derating Curve 120Vac & 277Vac

Outside Driver Ambient Temperature (°C)
Performance Characteristics

Efficiency v.s Load

- Efficiency(%)
  - 90.00%
  - 80.00%
  - 70.00%
  - 60.00%
  - 50.00%

- Load(%)
  - 50.00%
  - 60.00%
  - 70.00%
  - 80.00%
  - 90.00%
  - 100.00%

Load voltage options:
- 120V
- 277V

Power Factor V.S Load

- PF
  - 1
  - 0.98
  - 0.96
  - 0.94
  - 0.92
  - 0.9
  - 0.88

- Load(%)
  - 50.00%
  - 60.00%
  - 70.00%
  - 80.00%
  - 90.00%
  - 100.00%

Load voltage options:
- 120V
- 277V
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Programmable Driver Options (App Note)

All programmable drivers accept a 16-bit hexadecimal code to program the output current (Iout) of the driver. The Iout programming codes are documented in the computer based-programming software (STTOOLS.exe) or from the driver’s IOUTCODE.pdf file. The Locations below 0, 1, 2, 3 contain the basic code for a specific output current value (example 84 03 00 01 = 1050 mA for AC-50CD1.4APNZ).

<table>
<thead>
<tr>
<th>Location</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>100</td>
<td>00</td>
<td>100</td>
<td>00</td>
</tr>
</tbody>
</table>

For drivers containing Revision C of their firmware (contact factory for date code of implementation), it is also possible to adjust the minimum dimming level and the dimming speed. This adjustment is made by modifying location 2 of the programming code while keeping the other locations set for the desired output current. Specifically, the location 3 values are defined as:

- 00 => Dim to 1%, Speed ≤ 1.0 sec
- 01 => Dim-To-OFF, Speed ≤ 1.0 sec
- 02 => Dim to 10%, Speed ≤ 1.0 sec
- 03 => Dim to 1%, Speed ≥ 2.5 sec
- 04 => Dim-To-Off, Speed ≥ 2.5 sec
- 05 => Dim to 10%, Speed ≥ 2.5 sec

As an example, if the programming code value of 84 03 00 01 is programmed, the output current will be 1050 mA, and the driver will dim to 1% and the dimming speed will be ≤ 1.0 sec. If the programming code of 84 03 04 01 is programmed, the output current will be 1050 mA, and the driver will dim to off and the dimming speed will be ≥ 2.5 sec.