

Model Number
AC30CD700AP0Q

Input Voltage: 120-277V

Input Frequency: 50/60Hz

Side Mount/Leads Options

Dims to 1% or 10%

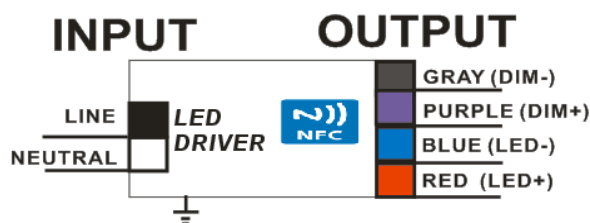
PROGRAMMABLE,
DIGITAL, WIDE-RANGE
AJUSTABLE CURRENT & DIMMING
CLASS P LISTED

ELECTRICAL SPECIFICATIONS:

Output Power	Input Power	Input Current	Min PF (full load)	Max THD (full load)	Output Voltage	Output Current	T case Max	Min Starting Temp**	IP Rating	Efficiency Up To	Dimming Protocol	Dimming Range
30W	35W	0.4@120V 0.18@277V	>0.90	<20	14-42V	125mA-700mA	90°C	-40°C	64	85	0 to 10V	1 to 100%

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

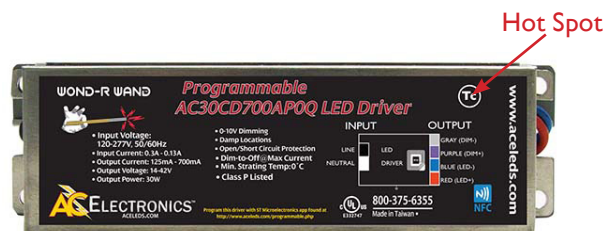
WIRING:



Lead Lengths

Black	5.9"	Blue	5.9"	Purple	5.9"
White	5.9"	Red	5.9"	Gray	5.9"

PHYSICAL:



Dimensions	Length	Width	Height	Mounting
AC30CD700AP0Q	6.22"	1.73"	1.22"	5.86"

Tref Max Value (°C)	Tc/Tref Value (°C)	Ta/Value (°C)
90	58.2	40

SAFETY:

- Class P Listed
- 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

- LED driver has a life expectancy of 100,000 hours at Tcase of ≤65°C
- Warranty: 5 yrs based on max case temp of <75°C; 3 yrs based on max case temp of 90°C*
- Input/Output Isolation

- FCC Title 47 CFR Part 15
- Surge Protection (1 Kv)

Programming instructions on the last page

INSTALLATION:

- IP 64
- Max Remote installation distance is 18 ft
- LED driver cases should be grounded

- LED drivers shall be installed inside electrical enclosures
- 18 AWG 600V/I05C 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.

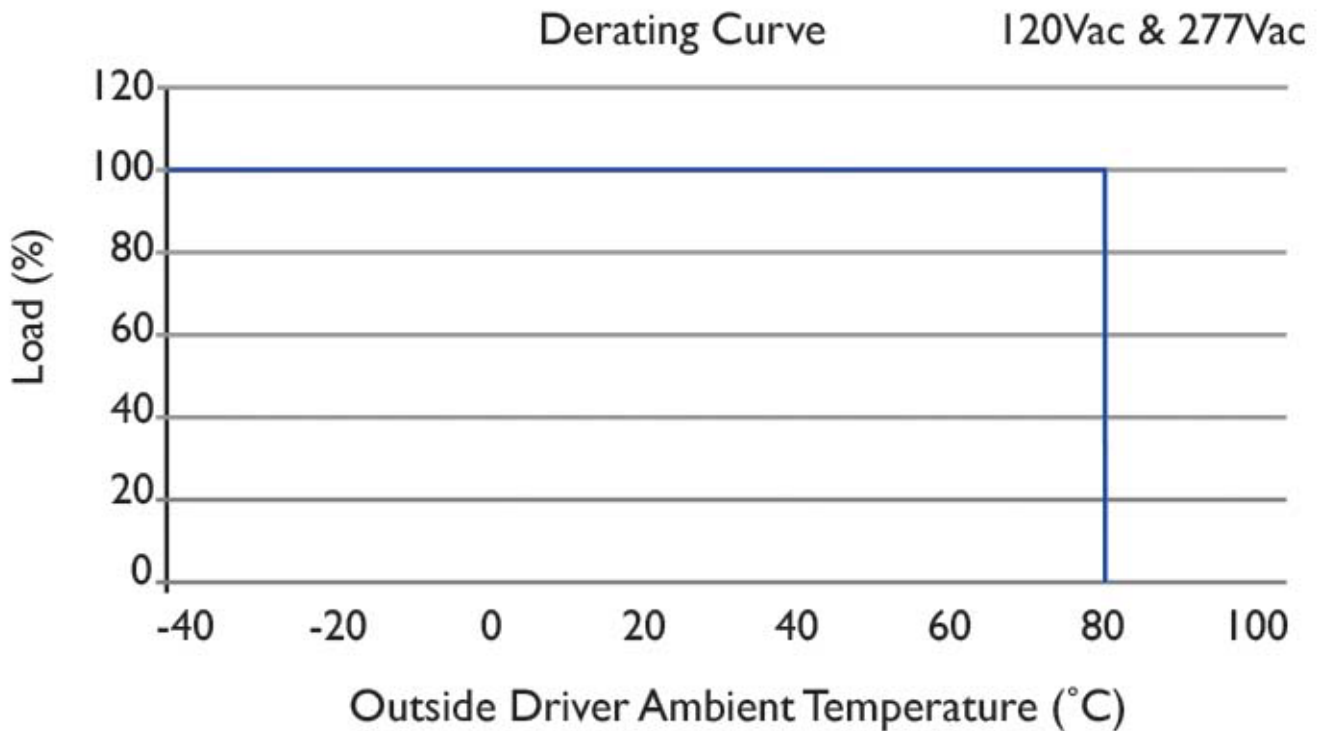
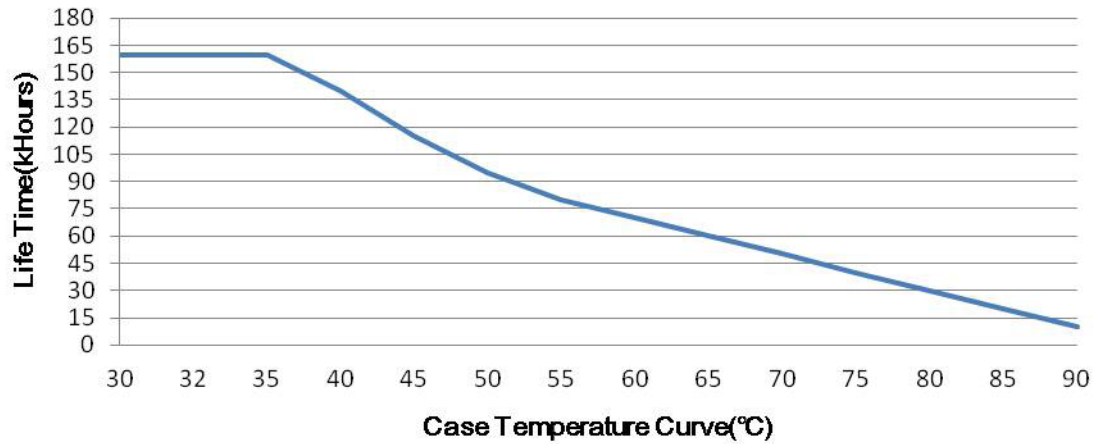
3401 Avenue D, Arlington, TX 76011 • 800-375-6355 • www.aceleds.com

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.

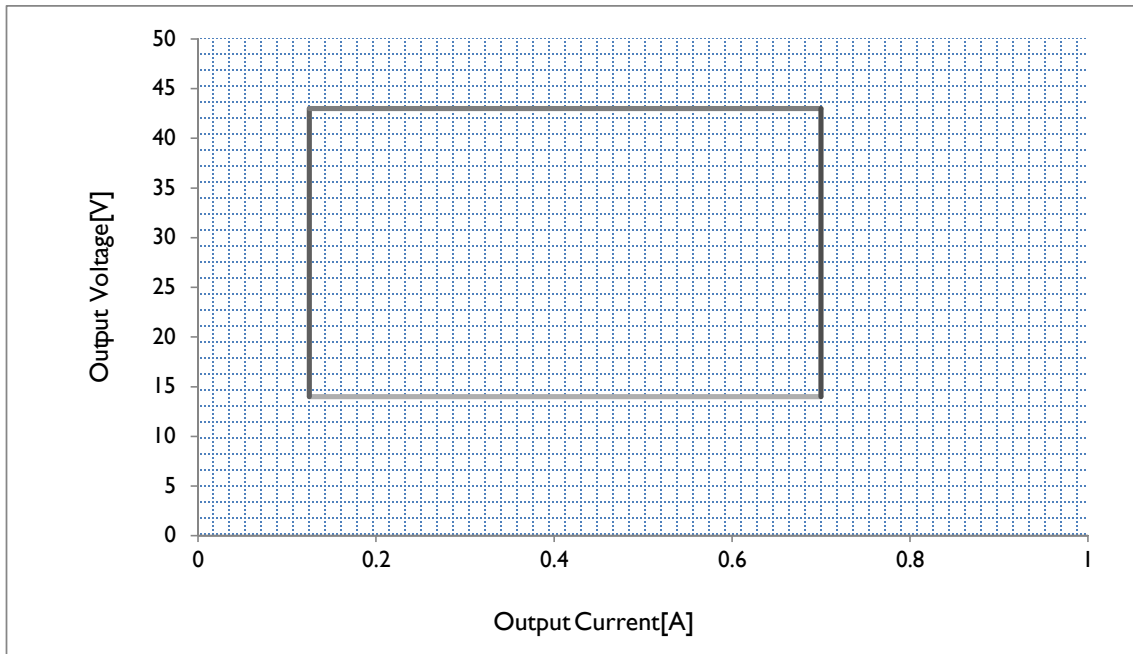


Performance Characteristics

Life Time v.s Case Temperature Curve

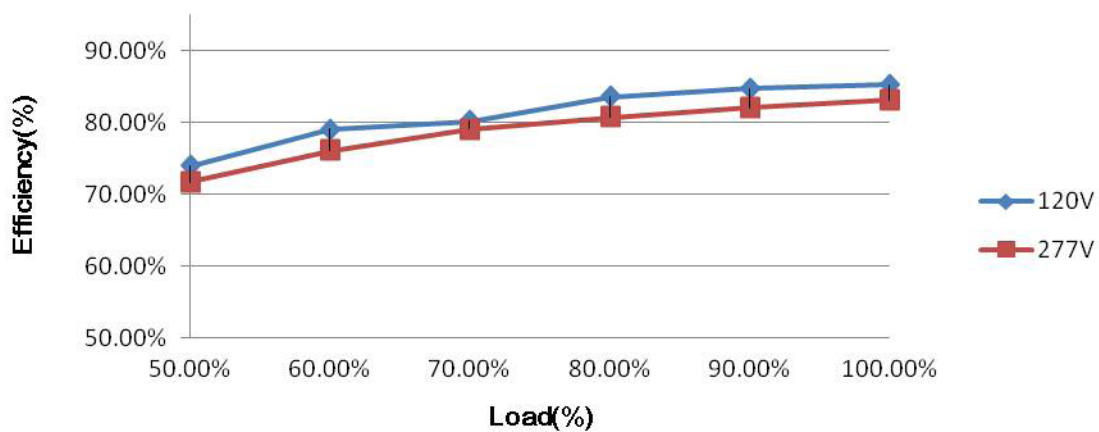


IOUT/VOUT CURVE

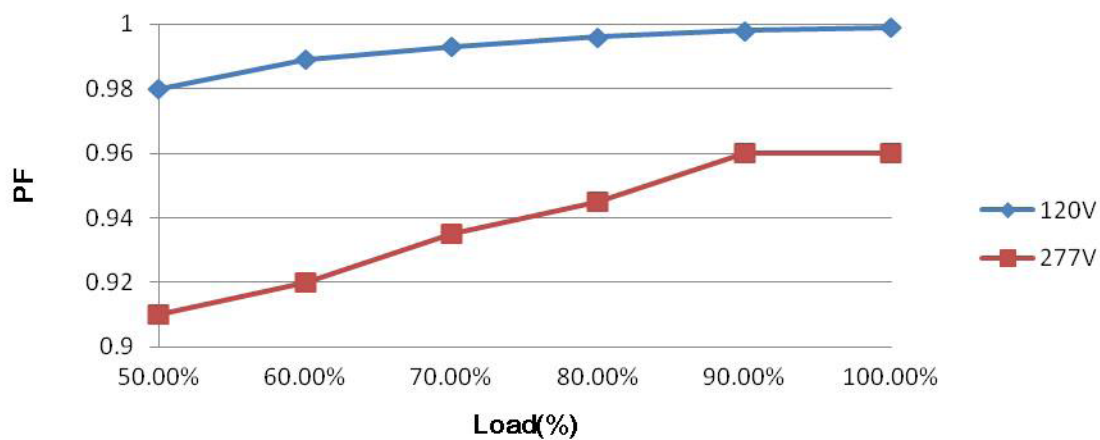


Performance Characteristics

Efficiency v.s Load

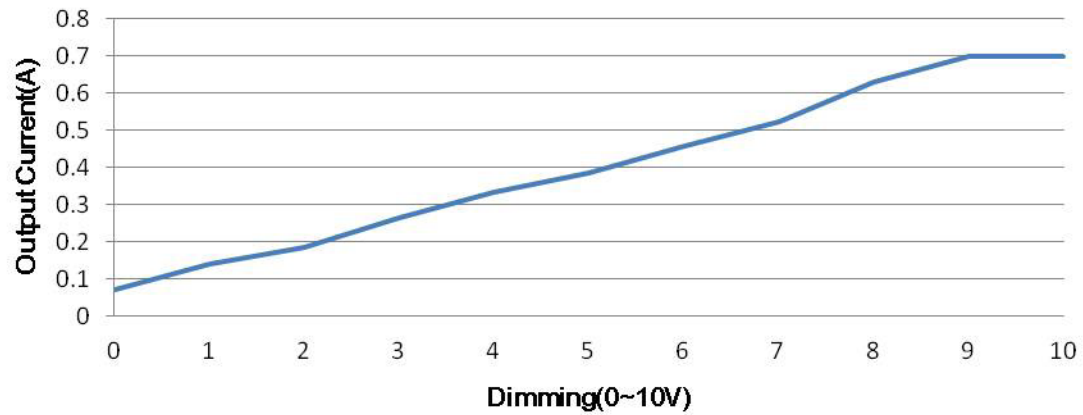


Power Factor V.S Load

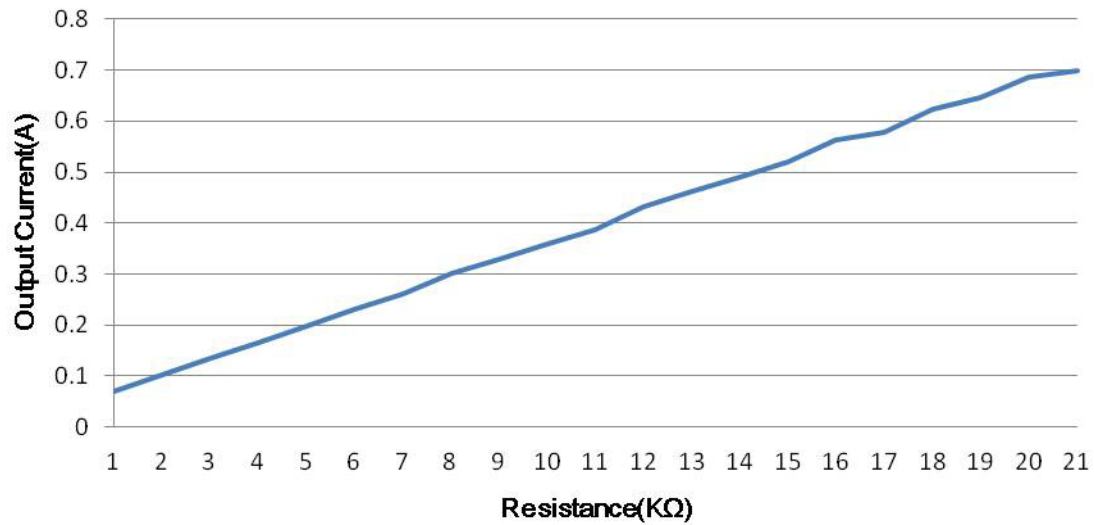


Performance Characteristics

Output Current v.s. Dimming



Resistance V.S Output Current



Programmable Driver Options (App Note)

All programmable drivers accept a 16-bit hexadecimal code to program the output current (I_{out}) of the driver. The I_{out} programming codes are documented in the computer based-programming software (ST-TOOLS.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).

Location | 0 | 1 | 2 | 3 |

Value | 00 | 00 | 00 | 00 |

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 2 values are defined as:

- 00 => Dim to 1%, Speed $\leq$ 1.0 sec
- 01 => Dim-To-OFF, Speed $\leq$ 1.0 sec
- 02 => Dim to 10%, Speed $\leq$ 1.0 sec
- 03 => Dim to 1%, Speed $\geq$ 2.5 sec
- 04 => Dim-To-Off, Speed $\geq$ 2.5 sec
- 05 => Dim to 10%, Speed $\geq$ 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 $\leq$ 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 $\geq$ 2.5 sec.