



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



Constant Current LED Driver

**Model Number
AC30CD700AP0Q**

P1

Input Voltage: 120-277V

Input Frequency: 50/60Hz

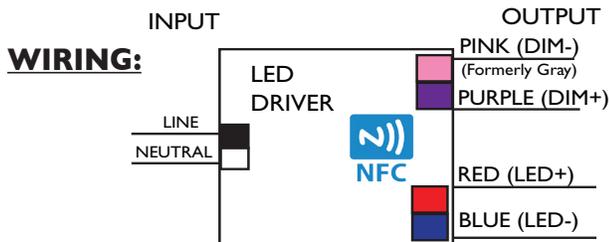
Side Mount/Leads Options

Dims to 0%-100% By NFC Settings

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	0.3@120V 0.13@277V	>0.90	<20	14-42V	125mA-700mA ±15%	90°C	0°C	64	85	0 to 10V	0 to 100%

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



Note: Gray (-) dimming wire has been changed to pink per the 2020 NEC section 410.69 and NEMA.

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

Lead Lengths					
Black	5.9"	Blue	5.9"	Purple	7.1"
White	5.9"	Red	5.9"	Pink	7.1"

PROTECTION	OVER 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

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

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 $\leq 75^{\circ}\text{C}$
- LED driver has a life expectancy of 100,000 hours at Tcase of

- $\leq 65^{\circ}\text{C}$
- 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)
- Gray (-) dimming wire has been changed to pink per the 2020 NEC section 410.69 and NEMA.

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/105C 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.

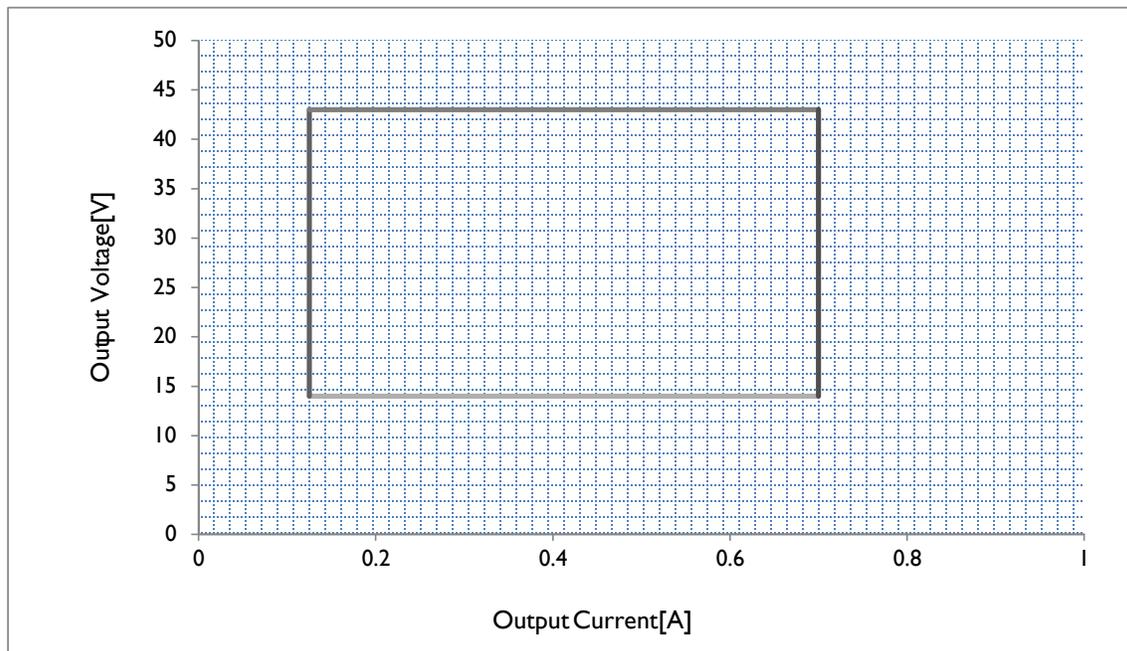
GENERAL INFORMATION

WARRANTY	5 Years $\text{TC} \leq 75^{\circ}\text{C}$, 3 Years $75^{\circ}\text{C} \leq \text{TC} \leq 90^{\circ}\text{C}$
Inrush Current	35A
MTBF	10,000 Hrs Type
Protection	Overload/Over temperature/Short circuit protection

APPROVALS

UL Class2, FCC Class A, RoHs, Type HL

IOUT/VOUT CURVE

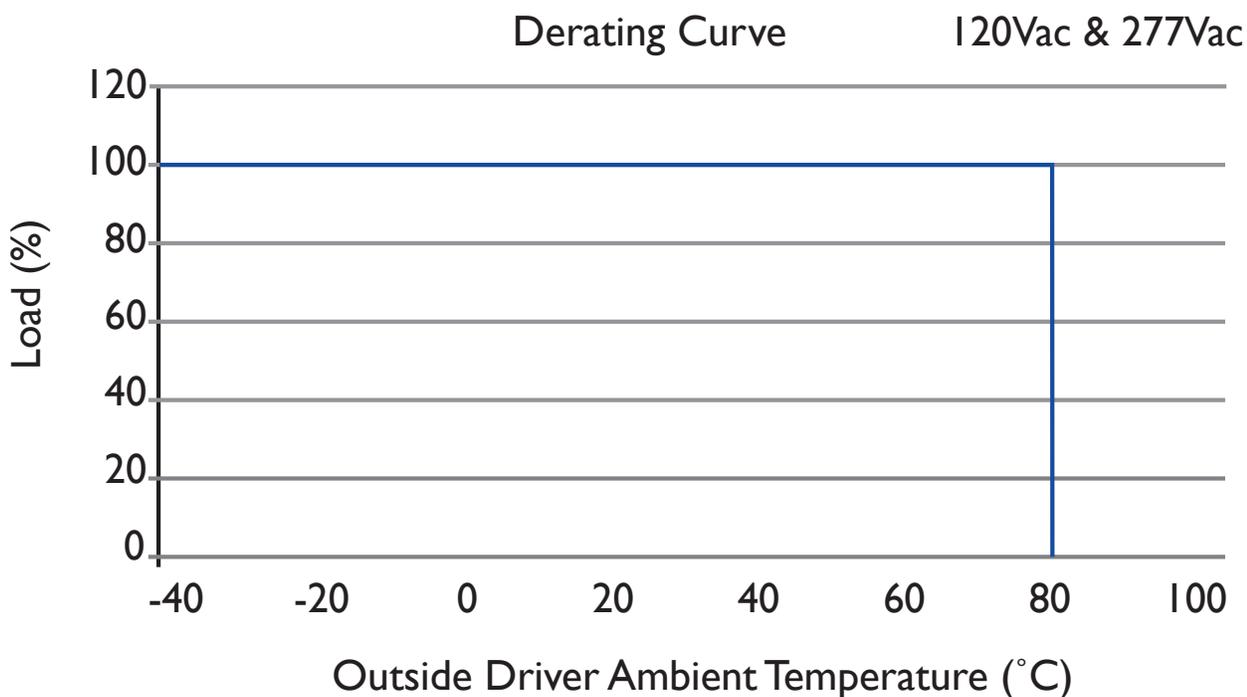
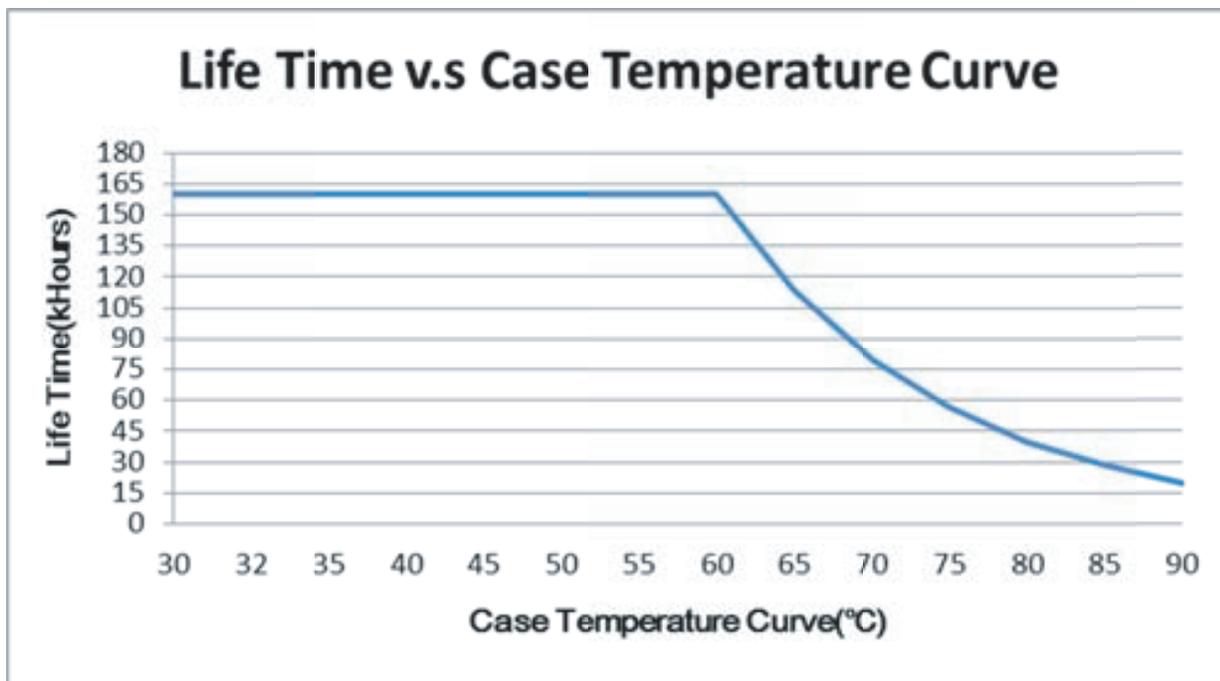


CONTROL THE IOUT WITH THE PROGRAMMING WAND. DOWNLOAD SOFTWARE FROM <http://www.aceleds.com/products-programmable.php>

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.

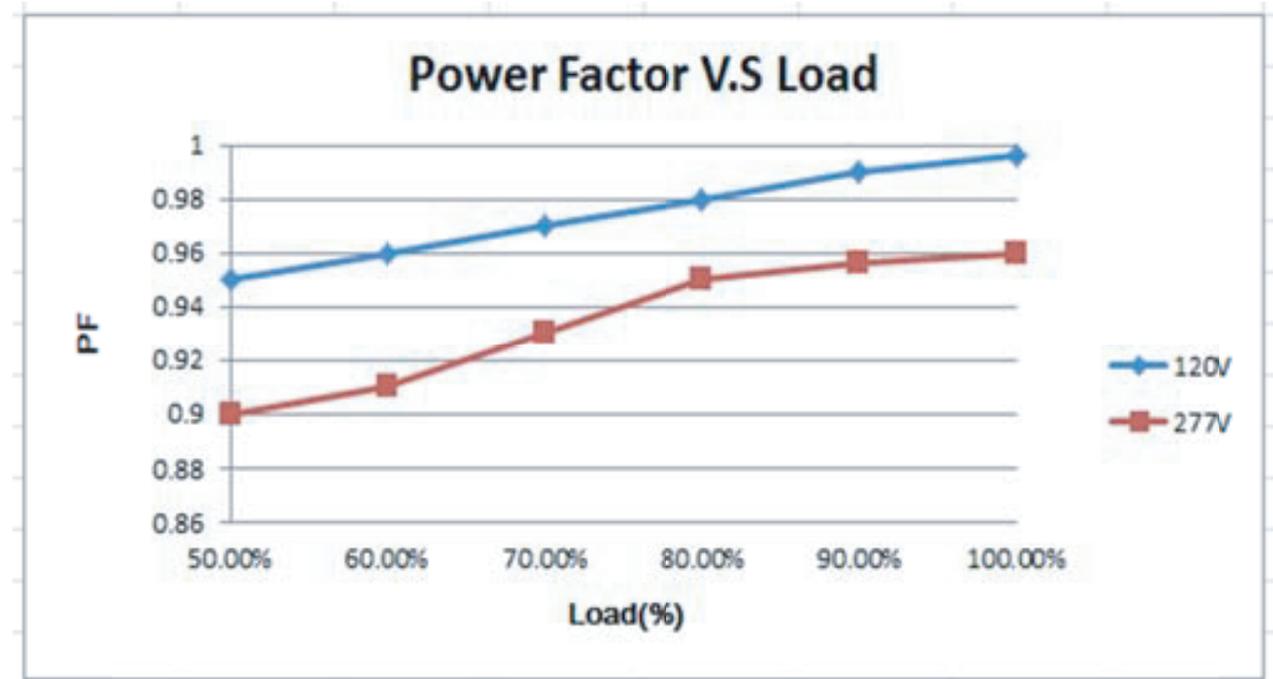
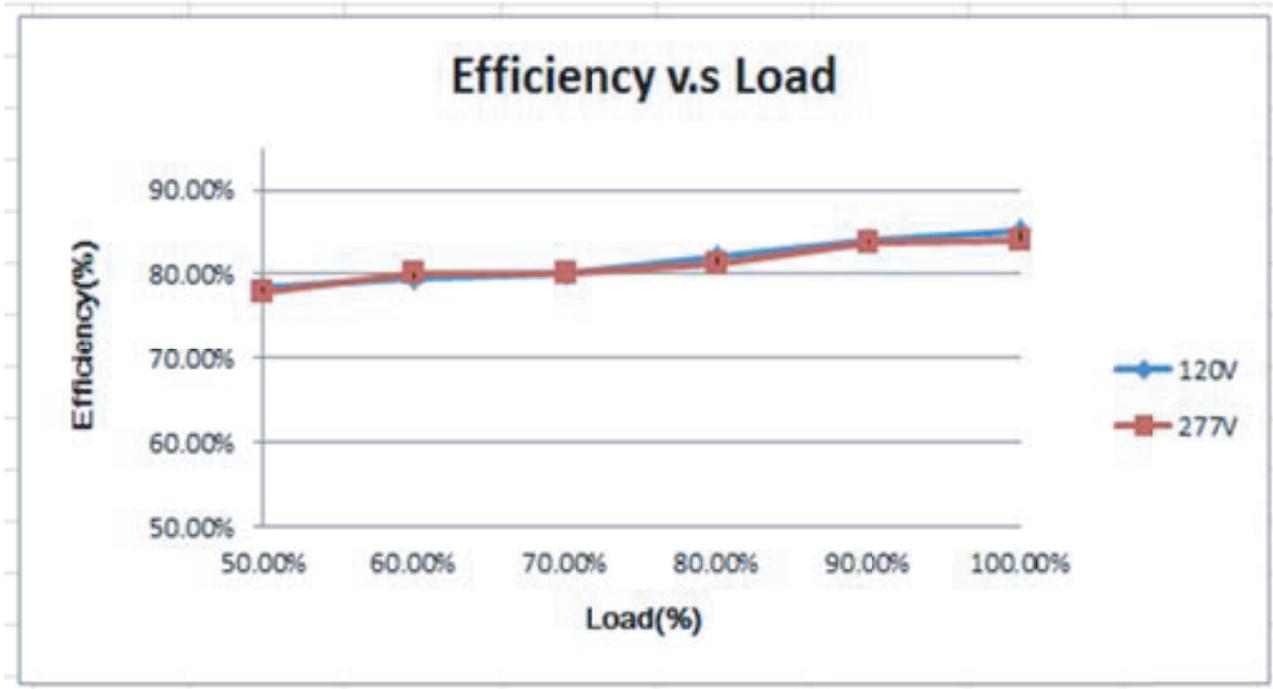
Performance Characteristics



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.

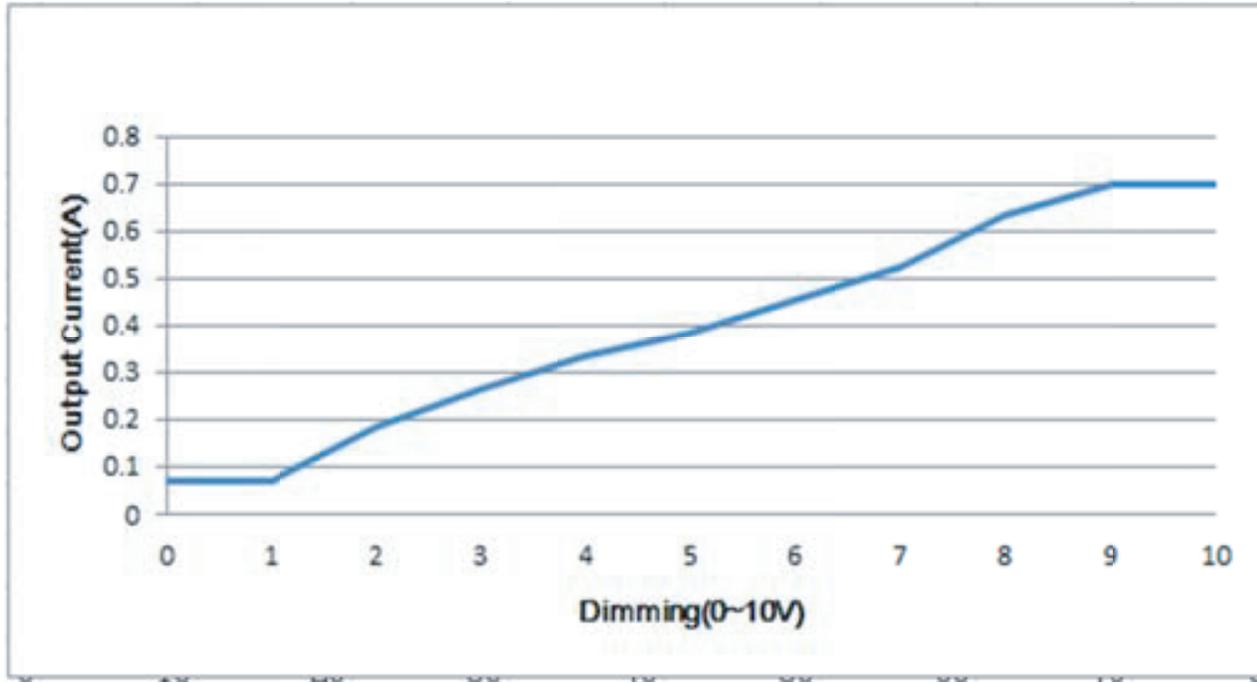
Performance Characteristics



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



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

Put the programmable wand above the NFC mark of the driver to start programming

CONTROL THE IOUT WITH THE PROGRAMMING WAND. DOWNLOAD SOFTWARE FROM <http://www.aceleds.com/programmable.php>



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 (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 | 100 | 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 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.