AC ELECTRONICS™
ACELEDS.COM

Switch-Hitter™
Constant Current LED Driver

Model Number AC-40CD1.05UVTS

Input Voltage: 120-277V
Input Frequency: 50/60Hz
Side Mount/Leads
1-100% Dimming

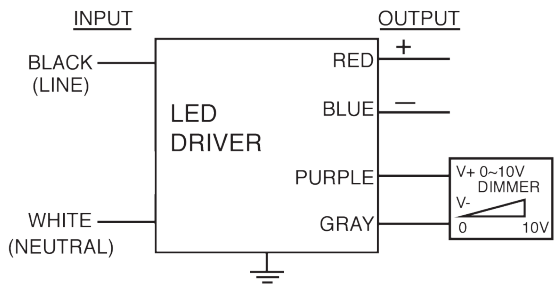
✓ MULTI-CURRENT SWITCHING & DIMMING

RoHS COMPLIANT LEAD-FREE

ELECTRICAL SPECIFICATIONS:

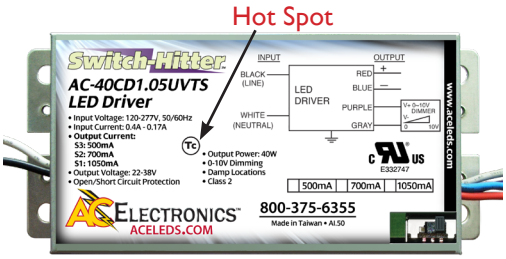
Output Power Max.	Input Power	Input Current	Min. PF (full load)	Max. THD (full load)	Output Voltage	Output Current	T case Max.	Min. Starting Temp.	IP Rating	Efficiency Up To	Dimming Protocol	Dimming Range
40W	45W @ 120V 44W @ 277V	0.38A @ 120V 0.16A @ 277V	>0.95	<20%	22-38V	1050mA±5%	90° C	-40° C	64	88%	0 to 10V	1 to 100%
26W	30W @ 120V 29W @ 277V	0.25A @ 120V 0.10A @ 277V	>0.95	<20%	22-38V	700mA±5%	90° C	-40° C	64	87%	0 to 10V	1 to 100%
19W	22W @ 120V 21W @ 277V	0.18A @ 120V 0.08A @ 277V	>0.95	<20%	22-38V	500mA±5%	90° C	-40° C	64	87%	0 to 10V	1 to 100%

WIRING:



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

PHYSICAL:



Dimensions			
Length	6.5"	Mounting Length	5.9"
Width	2.9"	Weight	0.83 lbs.
Height	1.18"	Case Qty.	40 pcs.

SAFETY & PERFORMANCE:

- UL and cUL Recognized, Class 2
- UL Outdoor Type 1
- Class A sound rating
- No PCBs
- 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 (3 KV)

INSTALLATION:

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

*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.

Revised 03/25/2019

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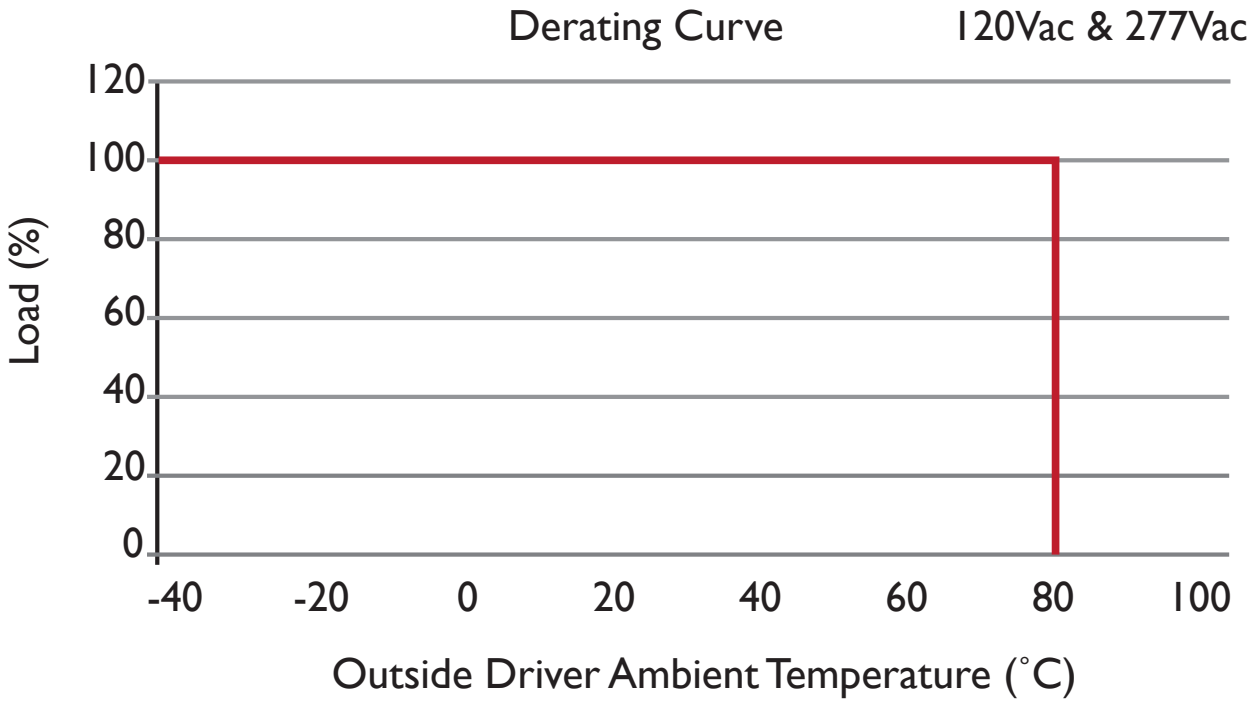
Performance Characteristics



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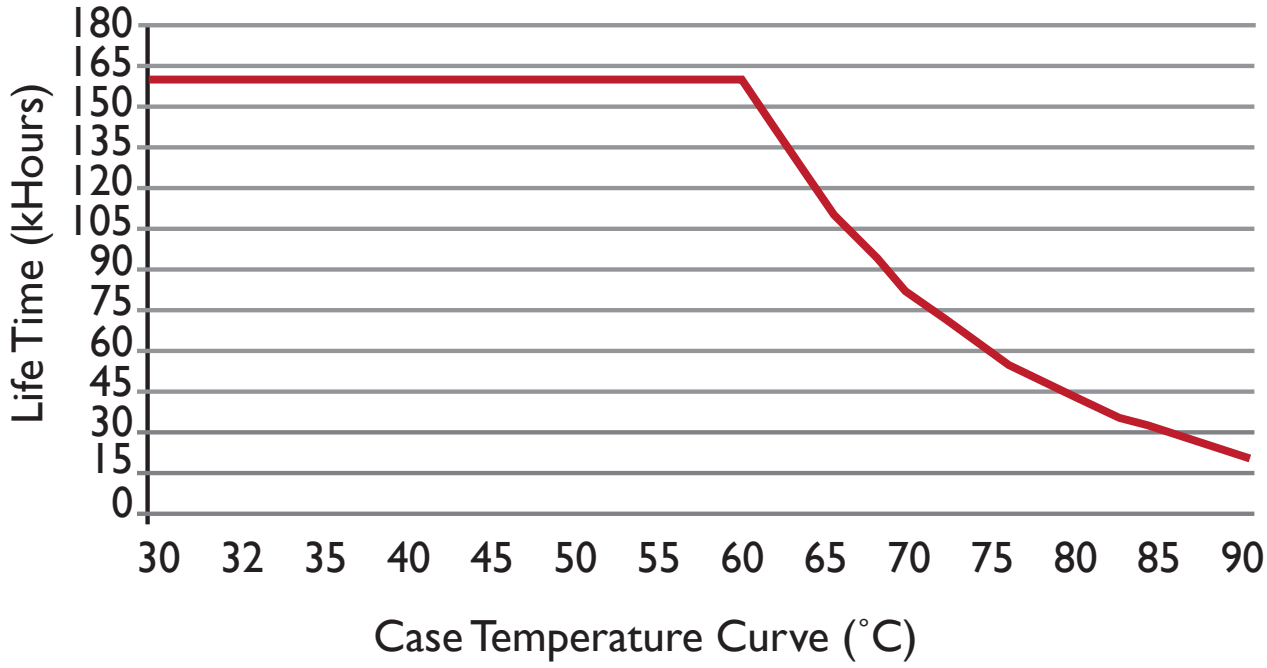
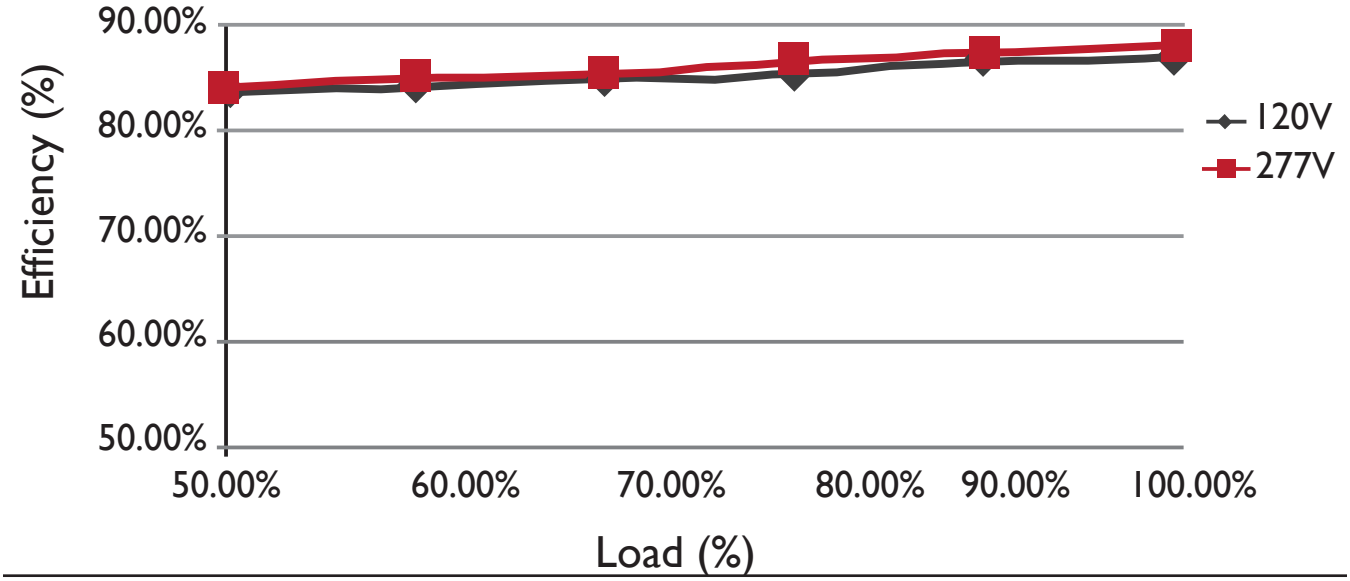
Life Time v.s. Case Temperature Curve



Efficiency v.s. Load



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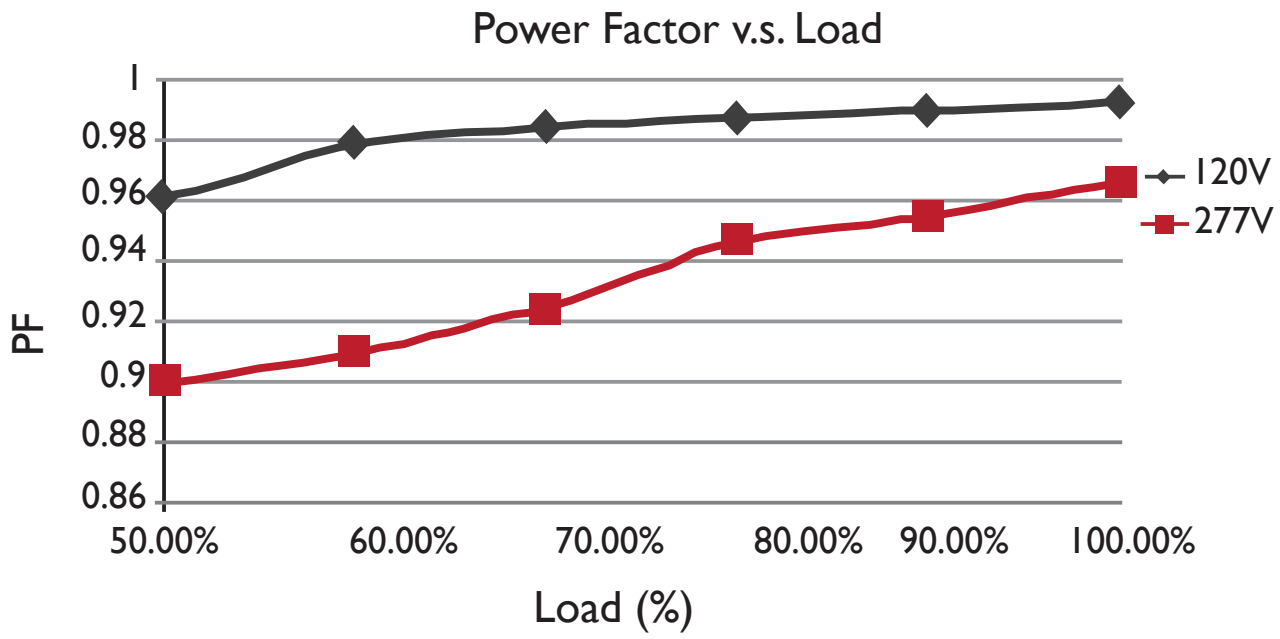

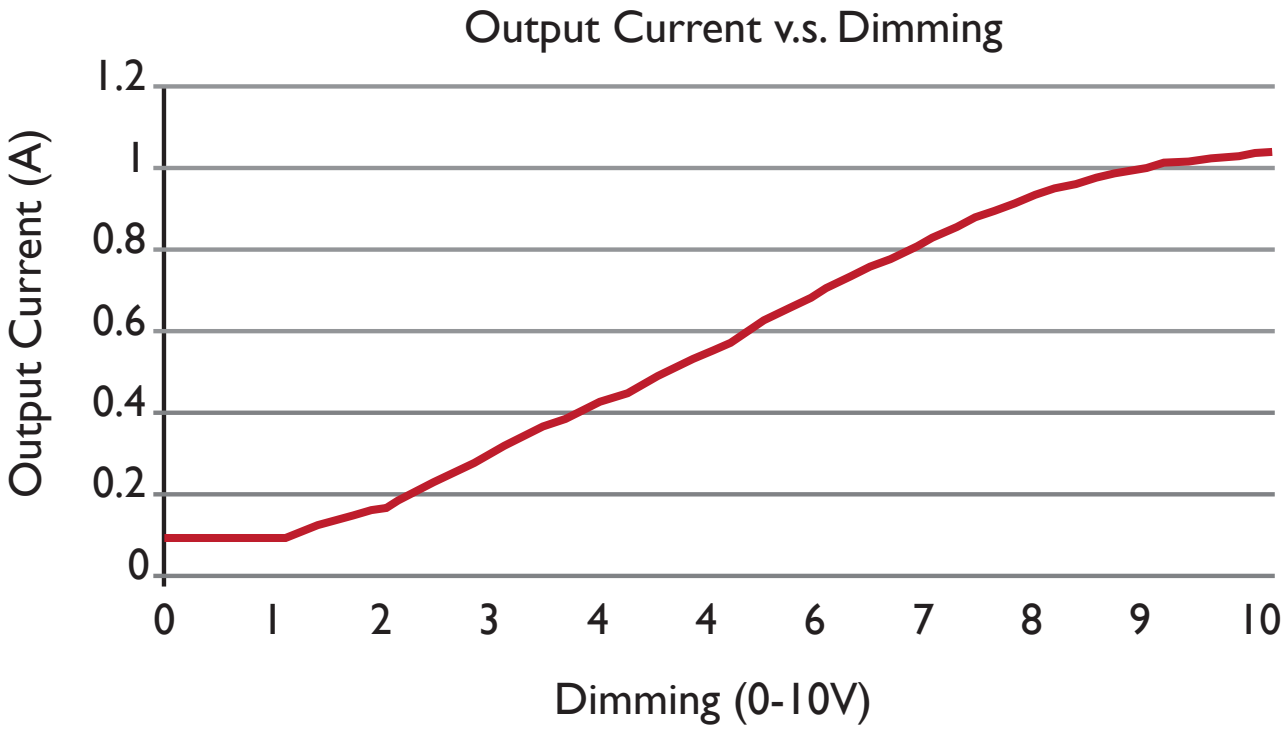

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Programmable Driver Options (App Note)

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 (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 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.

Revised 03/25/2019