



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

Constant Current LED Driver

Model Number **AC-50CDI.4APTNZ** **AC50CDI.4APBTNZ**

Input Voltage: 120-277V
Input Frequency: 50/60Hz
Side and Bottom Mount/Leads Options
< 1 Sec. Start time/(Starting with batch code AKT.48)
Dim-to-1% (Default)

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**	Efficiency Up To	Dimming Protocol	Dimming Range	IP Rating
50W	60W	0.5A@120V 0.22A@277V	>0.90	<20	15-55V	400mA- 1400mA	90°C	-40°C	85%	0 to 10V	1 to 100%	64

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

WIRING:

INPUT



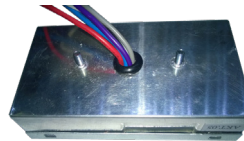
OUTPUT



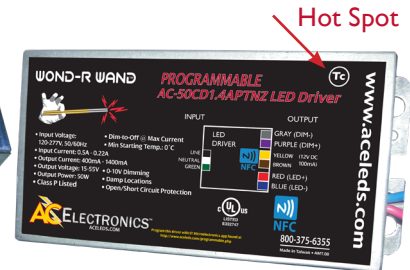
Lead Lengths

Black	5.9"	Blue	5.9"
White	5.9"	Red	5.9"
Purple	7.1"	Gray	7.1"
Yellow	5.9"	Brown	5.9"

PHYSICAL:



Bottom Mount
Model No:
AC-50CDI.4APBTNZ



Dimensions	Length	Width	Height	Mounting
AC-50CDI.4APTNZ	5.23"	2.48"	1.18"	4.84"
AC-50CDI.4APBTNZ	4.56"	2.48"	1.18"	2"

Tref Max Value (°C)	Tc/Tref Value (°C)	Ta/Value (°C)
90	61.7	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 (3 KV)
- Dim-To-Off Programming Option
 - o Active: Code = 78 05 01 01
 - o Inactive: Code = 78 05 00 01

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.

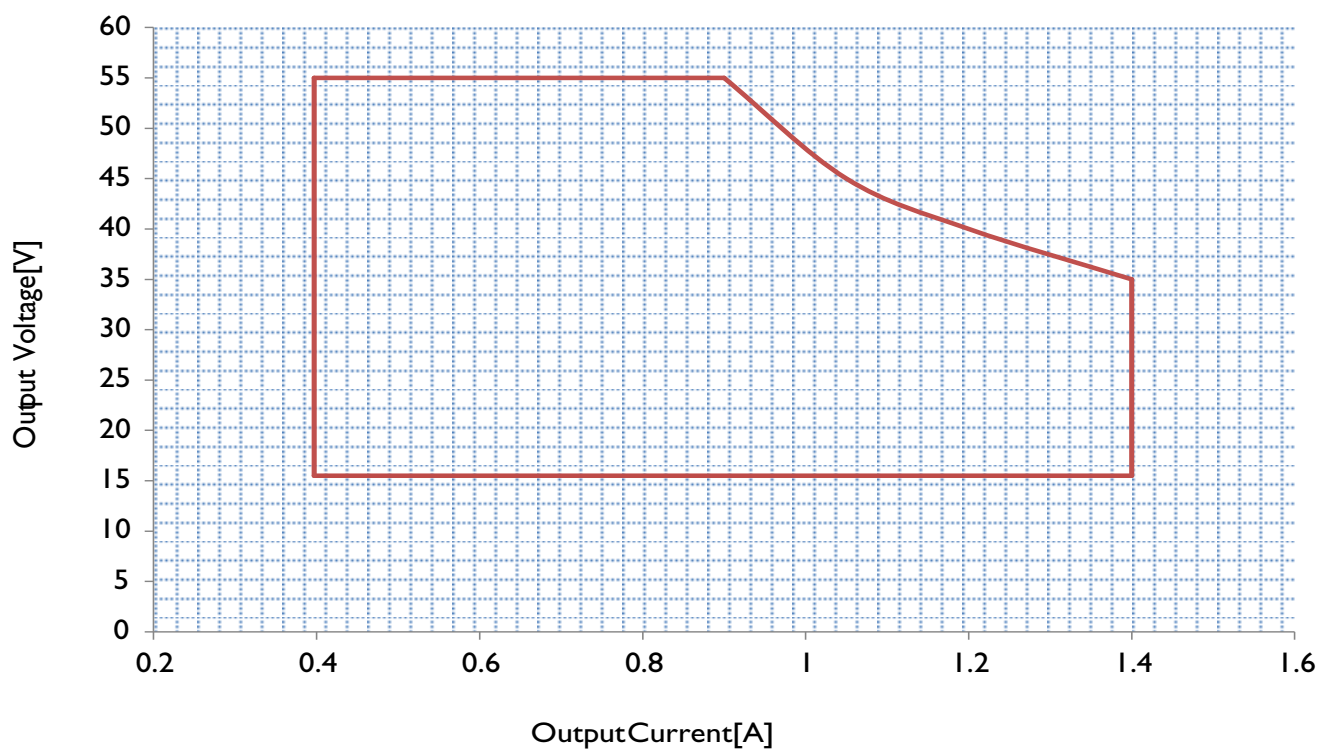
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Data is based upon tests performed by AC Electronics in a controlled environment and representative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications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



IOUT/VOUT CURVE

Use with [NFC-V Reader App](#) Available Free at Google App Store



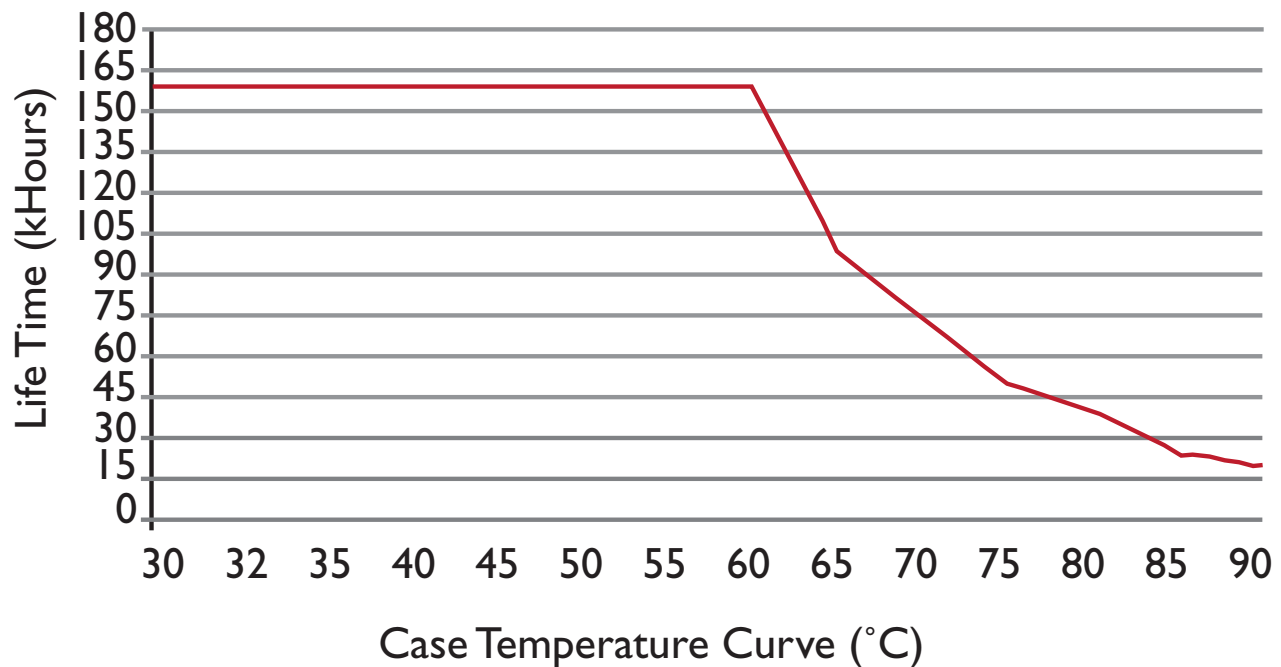
CONTROL THE IOUT WITH THE PROGRAMMING WAND. DOWNLOAD SOFTWARE FROM <http://www.aceleds.com/products-programmable.php>

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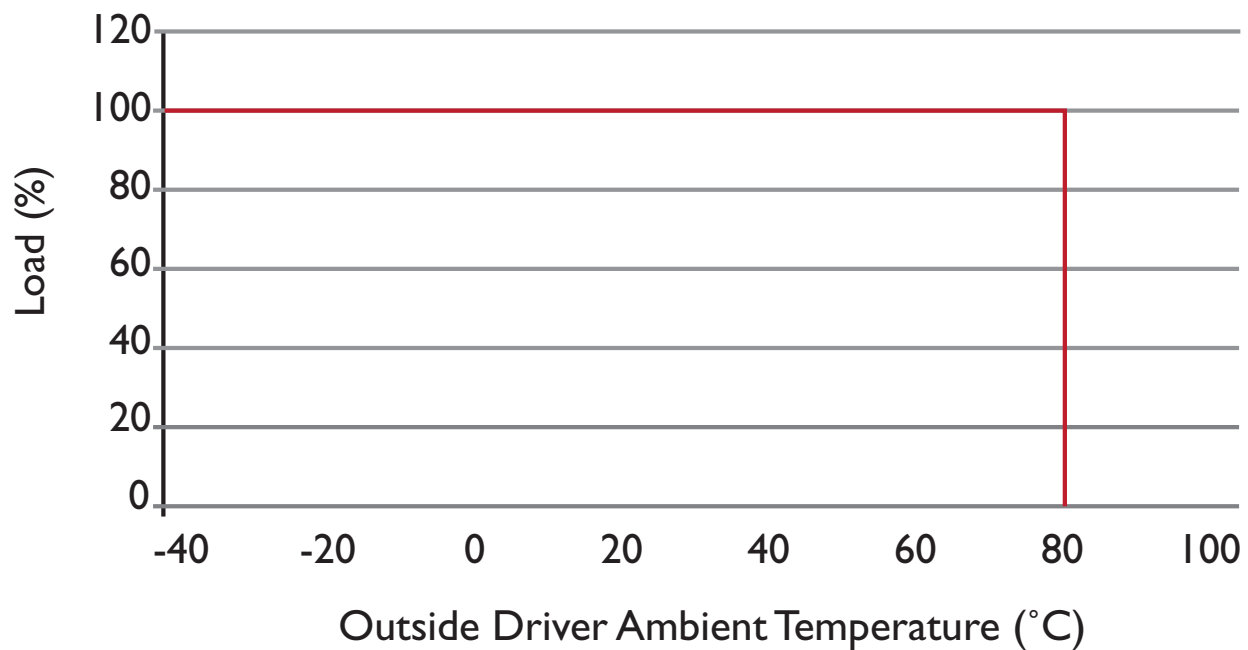
Performance Characteristics

Life Time v.s. Case Temperature Curve



Derating Curve

120Vac & 277Vac

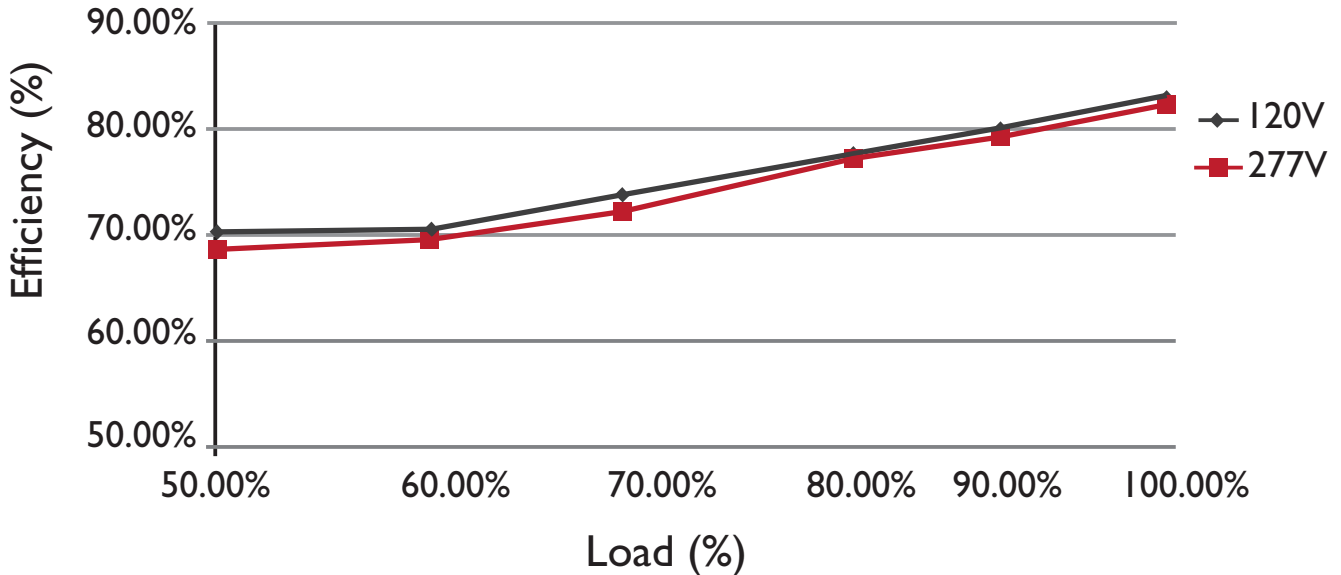


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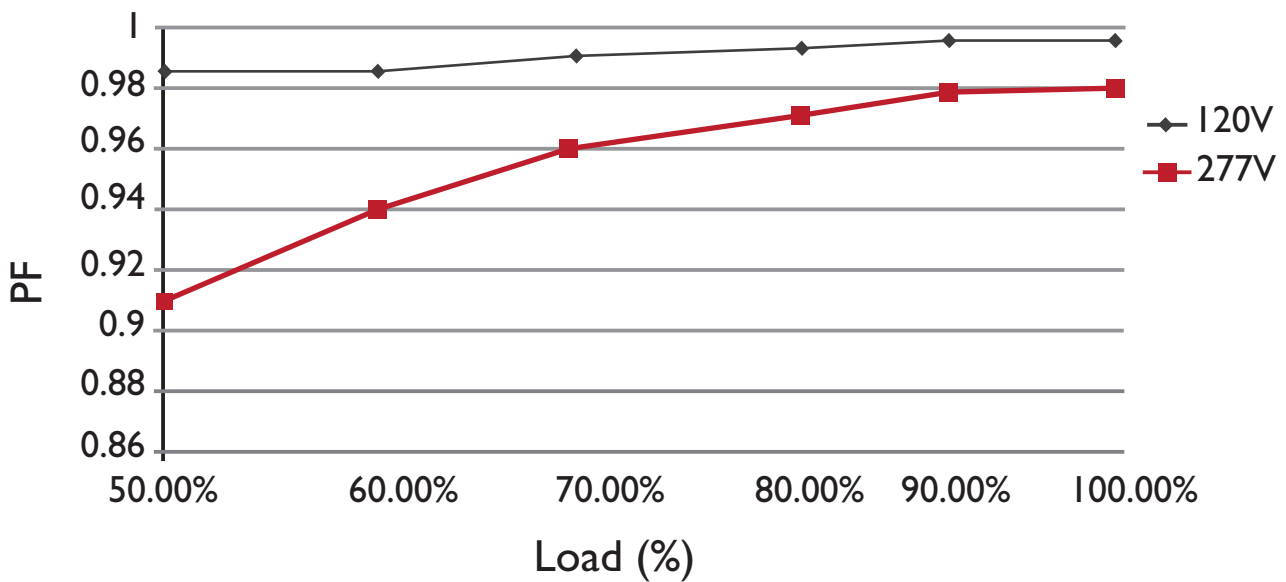
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Performance Characteristics

Efficiency v.s. Load



Power Factor v.s. Load

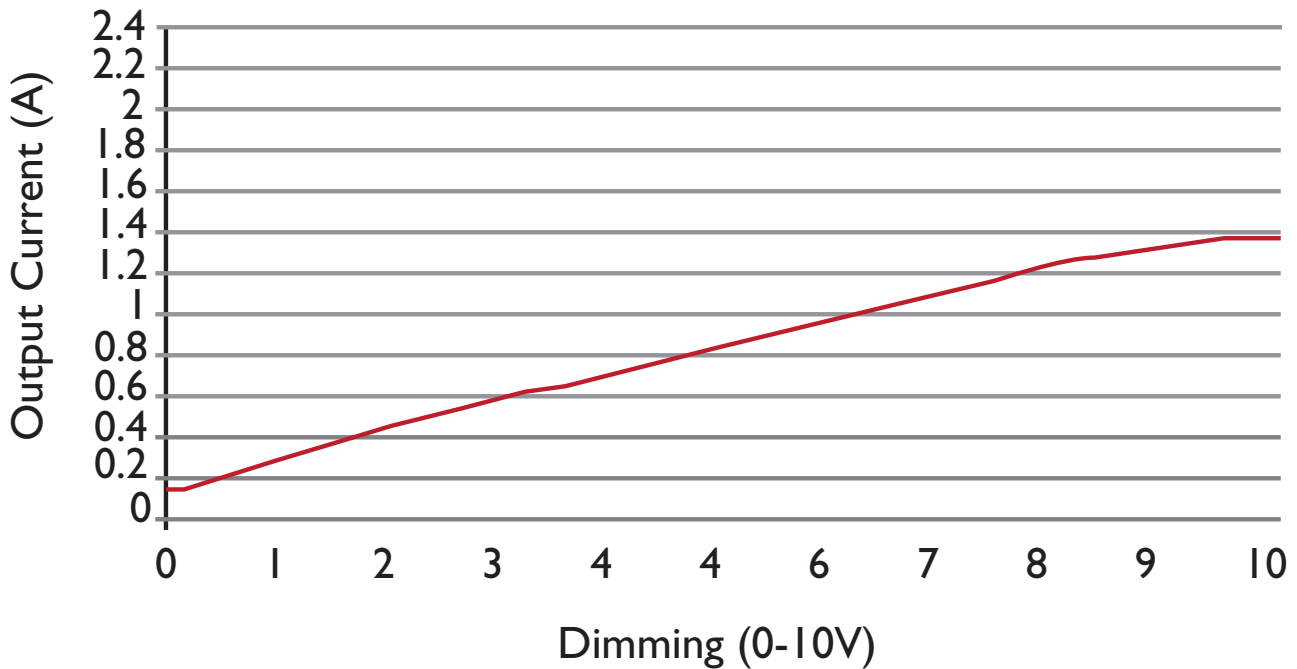


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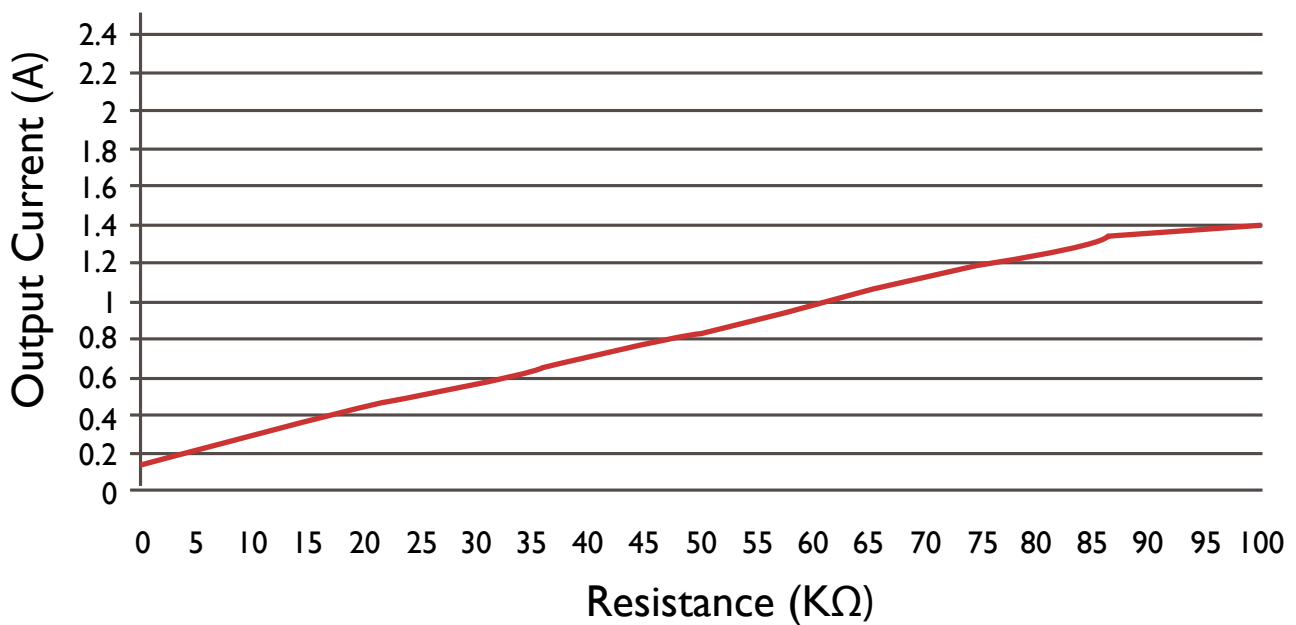
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Performance Characteristics

Output Current v.s. Dimming



Output Current v.s. Resistance



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