

### Constant Current LED Driver

# Model Number ACI00CDI.9A6U

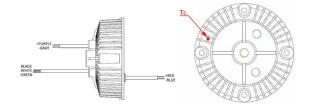
Input Voltage: I20-277V Input Frequency: 50/60Hz Side Mount/Leads



### **ELECTRICAL SPECIFICATIONS:**

Outp Powe Max	r   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	IP Rating	Dimming Protocol	Dimming Range
100V	/ II4W	0.96A@I20V 0.42A@277V	>0.9	<20	32-53V	1900mA +/- 5%	90°C	-40°C	88%	66	0 to 10V	10 to 100%

### **WIRING:**



Lead Lengths								
Black	11.8"	Blue	7.9"	Purple	7.1"			
White	11.8"	Red	7.9"	Gray	7.1"			
Green	11.8"		,					

### **PHYSICAL:**



Dimensions							
Length	5.2"	Height	2.83"				
Width	N/A	Mounting Length	4.45"				

### **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 (4 KV)

### **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 <u>aceleds.com</u> for complete warranty policy.

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### ACI00CDI.9A6U



### **Input Specifications**

Parameter	Min.	Тур.	Max.	Notes
Input Voltage	108V	120/277V	305V	
Input Current	-	-	1.0A RMS	@120Vac input with full load
Input Frequency	47Hz	60Hz	63Hz	
Leakage Current	-	-	0.7mA	@120Vac input
Turn On Time	-	-	1.0s	@120Vac input at full load
Hold Up Time	-	-	0.1s	@Nominal input and full load
Efficiency	87%	88%	90%	@277Vac input at full load
Standby Power	-	-	3W	
Current Total Harmonic	-	-	20%	

# **Output Specifications**

Parameter	Min.	Тур.	Max.	Notes
Output Voltage	32V	-	53V	
Output Current	-	1900mA	-	
No-Load Output Voltage	59V	62V	66V	
Rated Current	1800mA	1900mA	2000mA	
Rated Power	-	100W	-	
Line Regulation	-	-	±5%	
Output Current Ripple	-	±10%	-	

### **General Specifications**

Parameter	Min.	Тур.	Max.	Notes
MTBF	•	100,000 Hours	-	@25°C ambient temperature
Lifespan Time	75,000 Hours	-	-	In the range of specification required by normal use of the power supply at ambient temperature 55°C
Cold Start	-	-	1.0s	@ -40°C

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# ELECTRONICS ACIACELEDS.COM Performance Characteristics

### ACI00CDI.9A6U

# **Environmental Specifications**

Parameter	Min.	Тур.	Max.	Notes
Operation Temperature	-40°C	-	50°C	
Storage Temperature	-40°C	-	80°C	
Humidity	10%	-	90%	

High Temperature Durability	Switch ON/OFF Test
Power storage environment at 80°C 24hours, will not damage the electrical, mechanical properties and also not cause other adverse reactions.	Power at ambient temperature 25°C 1s/on, 1s/off, last up to 10,000 cycles, will not damage the electrical ,mechanical properties and also not cause other adverse reactions.

# **Safety and EMC Compliance**

Safety Standards	Withstand Voltage	Isolation Resistance	EMC Standards		
		I/D O/D:	EMI	EMS	
UL 8750 UL1310	I/P-O/P: 2.0K Vac I/P-FG: 2.0K Vac O/P-FG: 0.5K Vac	I/P-O/P: I/P-FG: O/P-FG: 100Mohm/500VDC	FCC Part 15 class A  UL8750  CSA C22.2 No.  250.13-14	FCC Part 15 class A UL 8750	

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84.00%

82.00% 80.00%

60.13%

66.74%

73.27%

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**—** 277

### Efficiency V.S. Load

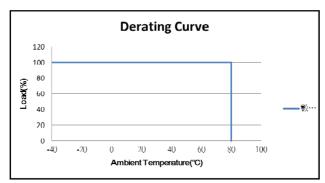
### Efficiency v.s Load 94.00% 92.00% 90.00% 88.00% — I20\ 86.00%

79.56%

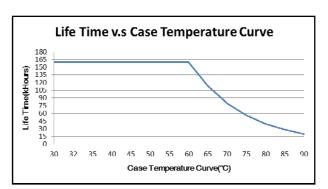
Load(%)

86.40% 92.56% 100.00%

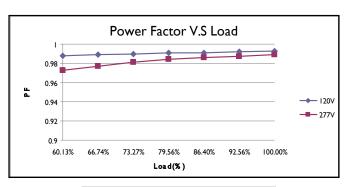
### **Derating Curve**



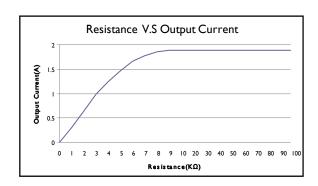
### **Life Time Curve**



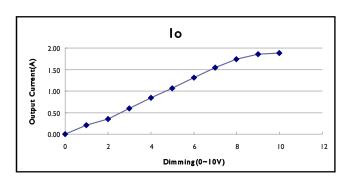
### **Power Factor V.S. Load**



### **Resistance V.S. Output Current**



### **Dimming Characteristic**



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