

Constant Current LED Driver

Model Number ACI60CD3.3A6U

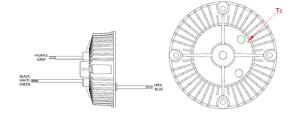
Input Voltage: I20-277V Input Frequency: 50/60Hz Side Mount/Leads



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	Efficiency Up To	IP Rating	Dimming Protocol	Dimming Range
160W	178W	I.48A@I20V 0.64A@277V	>0.9	<20	29-48V	3300mA +/- 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	5.98"	Height	2.83"			
Width	N/A	Mounting Length	5.2"			

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 (6 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.

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

KOH.

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.

ACI60CD3.3A6U



Input Specifications

Parameter	Min.	Тур.	Max.	Notes
Input Voltage	108V	120/277V	305V	
Input Current	-	-	1.48A 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	29V	-	48V	
Output Current	-	3300mA	-	
No-Load Output Voltage	54V	57V	60V	
Rated Current	3150mA	3300mA	3450mA	
Rated Power	-	160W	-	
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	-	-	1.0 s	@-40°C

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.

ACI60CD3.3A6U



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	

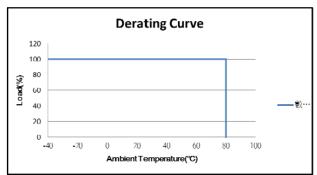


ACI60CD3.3A6U

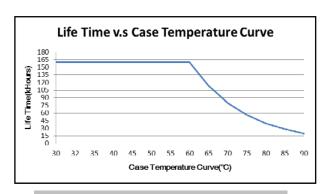
Efficiency V.S. Load

Efficiency v.s Load 94.00% 92.00% Efficiency (%) 90.00% 88.00% - 120V 86.00% 84 00% **−** 277\ 82.00% 80.00% 63.60% 71.72% 85.63% 92.65% 100.00% Load(%)

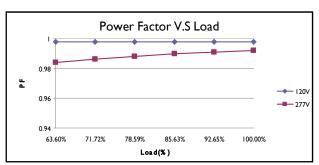
Derating Curve



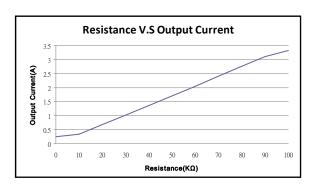
Life Time Curve



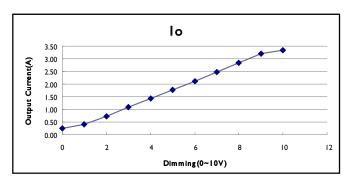
Power Factor V.S. Load



Resistance V.S. Output Current



Dimming Characteristic



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.