

by (s) ignify

LED Driver

CertaDrive





CR014C035V042RNR1

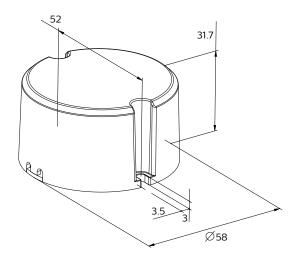
Advance CertaDrive indoor LED drivers are designed to meet basic lighting needs. These drivers are offered with specific voltage-current settings and are, thus, optimized with specifications that are appropriately suited for the application, making LED conversion affordable.

Specifications

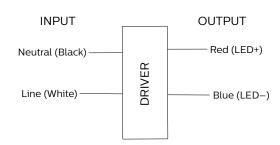
Input Volt. (Vac)	Output Power (W)	Output Volt. (V)	Output Current (A)	Efficiency @ Max. Load and 70°C Case (%)	Max. Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max. Load (%)	Power Factor @ Max. Load	Surge Protect. (Combi- Wave, KV)	Envir. Protect. Rating	Dim	Dimming Range (with specified dimmers)	Min. Output Current (A)	Other Comments
120	14	21-42	0.35	86%	Life- 85°C UL- 90°C	0.14	16	<15%	>0.95	2.5	UL damp & dry	LE + TE Leading Edge & Trailing Edge	3% ~ 100%	0.00105	Only @ 120V

Enclosure

R can	In. (mm)
Case Diameter	2.283 (58)
Case Height	1.25 (31.7)
Mounting Length	2.05 (52)



Wiring Diagram



Input and output use lead-wires.

Input lead-wires are 18AWG 105C/600V solid copper wires.

Output lead-wires are 22AWG 105C/600V stranded copper wires.

Input lead length outside enclosure: 162mm(+/-10mm)

Output lead length outside enclosure: 254mm(+/-10mm)

All wires have tinned ends.

CAUTION: For connections use wire rated for at least 90°C (194°F).

Pour Les connexions utiliser des conducteurs d'alimentation convenant 90°C (194°F).







14W 0.35A 42V LE+TE INT

Features

- 50,000+ hour lifetime1
- UL Class 2 output with adjustable drive current
- \cdot Leading edge / Trailing edge dimming
- · Compact form factor

Benefits

- Enables easy design-in with excellent thermal performance
- Enables simple, fast, flexible applicationspecific configurations
- · Enables light levels suited for the application
- Enables design of low profile fixtures

Application

- · Indoor downlight and track applications
- Retail
- Hospitality

Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

Product Data

Order Information Full Product Code CR014 Line Frequency 50/60 Min. Mains Voltage Operational 108 Va Max. Mains Voltage Operational 132 Va Output Information	ac .			
Line Frequency 50/60 Min. Mains Voltage Operational 108 Va Max. Mains Voltage Operational 132 Va	DHz ac			
Min. Mains Voltage Operational 108 Va Max. Mains Voltage Operational 132 Va	ac .			
Max. Mains Voltage Operational 132 Va				
	ac .			
Output Information				
Maximum Open Circuit Voltage < 60V	dc Class 2 Output			
Output Current Ripple (ripple = peak to average / average)	nax @ max lout			
(within full output operating range) Output	350mA: (-8% / +8%) Output Current variation includes effects of line and load regulation, temperature variation and component tolerances			
Protections Short	Circuit, Open Circuit Protection for LED + and LED - and Temperature Foldback			
Features				
Dimming LE + T	E dimming 3% min			
Environment & Approbation				
Operating Ambient Temp. Range -20°C	-20°C to +75°C			
Max Case Temperature (Tcase) Max. 9	Max. 90°C, Tcase Life: 85°C			
Agency Approbations UL875	UL8750, CSA250.13, Class P Listed (UL, CSA & ETL)			
Electromagnetic Compliance FCC T	FCC Title 47 Part 15 Class B			
Audible Noise <24dE	Class A			
Weight 0.29 II	bs. / 130 g			

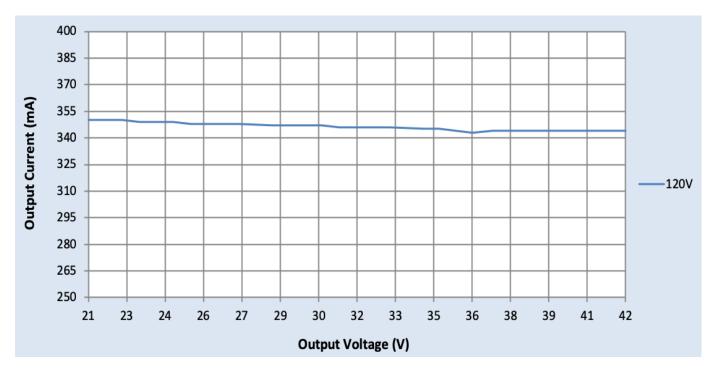
Advance CertaDrive LED drivers are manufactured to engineering standards correlating to a designed and average life expectancy of 35,000 hours of operation at maximum rated case temperature. Minimum 90% survivals based on MTBF modeling.

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lout Vs. Vout



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Approved Dimmer List

Leading edge dimmers

Manufacturer	Manufacturer Part Number	Additional Considerations	
	SLV-600X		
	S2-LX		
Ludana	GL-600H		
Lutron	NFTU-5A		
	DVCL-153P		
	DVLV-600P		
	6602-x		
	6681-x	Dimmers can be loaded	
	6683-x	up to 80% of their max power rating. The	
	6684-x	minimum number of drivers per dimmer is 1	
Leviton	700-x		
	705-x		
	6633		
	6674		
	IPI06-1LZ		
Cooper	9530XXX		
Lightolier	MP600X		
Philips	SR150LED120		

Trailing edge dimmers

Manufacturer	Manufacturer Part Number	Additional Considerations	
	NTELV-600-XX		
	SELV-303P		
Lutron	MAELV-600-XX		
	DVELV-300P-XX	Dimmers can be loaded up to 80% of their max	
	SELV-300P-XX	power rating. The minimum number of drivers per dimmer is 1.	
	IPE04-1LZ		
Leviton	VZE06-1LX	·	
	6615-POT		
Philips	SR400RPC120		

Note:

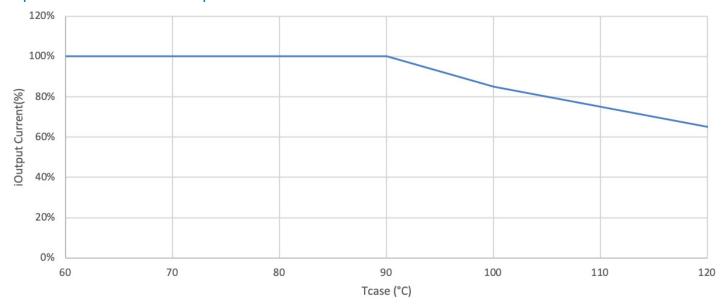
Minimum Dimming level: Up to 3% @ conduction angle of 25 degrees (performance dependant on dimmer model).

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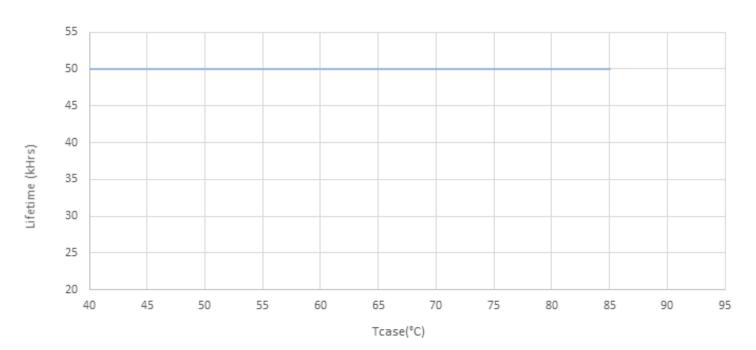
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Output Current Vs. Driver Case Temperature



Driver Lifetime vs. Driver Case Temperature

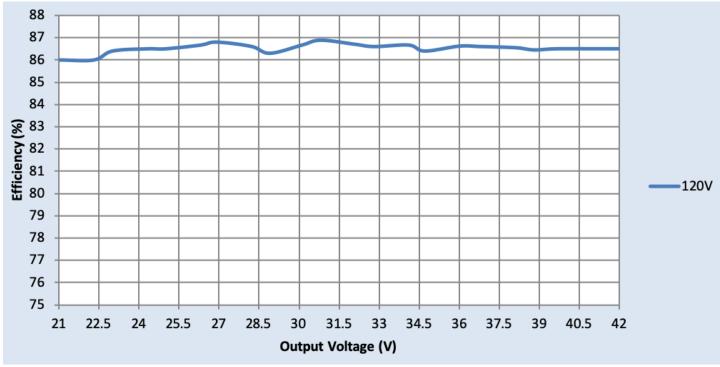


14W 0.35A 42V LE+TE INT

Performance Characteristics

Based on measurements on a typical sample at 75° C case. The accuracy of the measurements is within the tolerance of the measurement instruments.

Efficiency Vs. Output Voltage

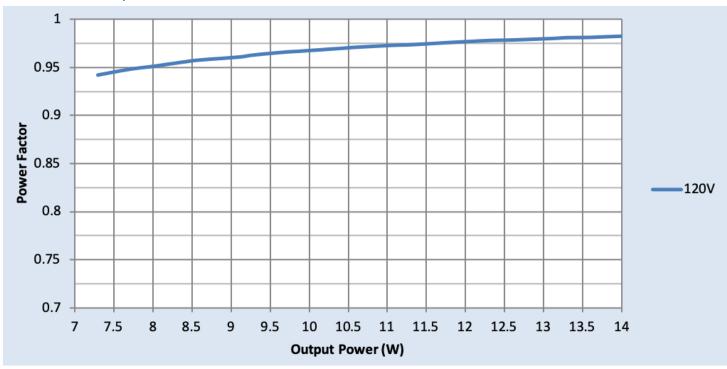


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Performance Characteristics

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Power Factor Vs. Output Power

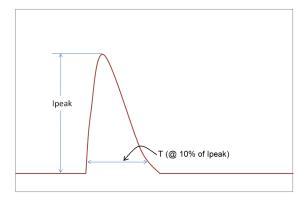


Total Harmonic Distortion (THD) Vs. Output Power



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Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)
120 Vrms	6.8A	15µS

Inrush current is measured at peak of the corresponding line voltage. Source impedance per NEMA 410.

Lightning Surge Info

ANSI Surge Type	Differential Mode (L-N)
100 kHz Ring Wave (w/t 30Ω)	2.5kV

Isolation

Isolation	Input	Output	
Input	n/a	2xU+1kV	
Output	2xU+1kV	n/a	

U = Max working voltage

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