ADVANCE

by (signify

LED Driver

CertaDrive

CI025C060V042CNU1



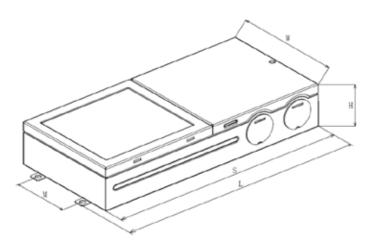
Advance CertaDrive indoor LED drivers are designed to meet basic lighting needs. These drivers are offered with specific voltage-current settings and are, thus, optimized with specifications that are appropriately suited for the application, making LED conversion affordable.

Specifications

Input Volt. (Vac)	Out- put Pow- er (W)	Output Volt. (V)	Out- put Cur- rent (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 Protection (Combi- Wave, KV)	Envir. Protec- tion Rating	Dim	Dimming Range (with specified dimmers)	Min. Output Current (A)	Driver Type
120		27-42 Class	Class		89		0.21	<15%	>0.95		UL damp	0-10V Analog	5% ~		Constant
277		2 Out- put		88	75	0.1	29	<20%	>0.90	2.5	& dry	Class 2 Wiring	100%	0.03	Current

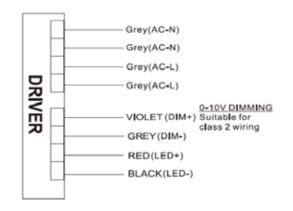
Enclosure

	In. (mm)
Case Length (S)	7.13 (181)
Case Width (W)	3.30 (83.8)
Case Height (H)	1.35 (34.3)
Mounting Length (M)	1.77 (45)
Overall Length (L)	7.39 (187.8)



Typical LED forward voltage 36V, over voltage protection threshold >45V.

Wiring Diagram



Input and output use lead- wires.

Lead-wires are 18AWG 105C/600V solid copper or tinned stranded copper wire.

Warning

- Install in accordance with national and local electrical codes.
- The field-wiring leads or push-in terminals shall be fully enclosed.



Features

- 50,000+ hour lifetime¹
- Excellent thermal performance
- High power factor & low THD²

Benefits

- Enables long life luminaire designs
- Allows operability in indoor (low-bay) ambient conditions
- $\boldsymbol{\cdot}$ Suitable for commercial indoor applications

Application

- Indoor linear troffers, pendants
- Office areas
- Retail centers
- Educational facilities

Electrical Specifications

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

Product Data

Order Information					
Full Product Code	CI025C060V042CNU1M (Mid-Pack, 16pcs/Box) 12NC:929001758613				
Line Frequency	50/60Hz				
Min. Mains Voltage Operational	108 Vac				
Max. Mains Voltage Operational	305 Vac				
Output Information					
Maximum Open Circuit Voltage	60Vdc, Class 2 output				
Output Current Ripple (ripple = peak to average / average)	30% max @ max lout				
Output Current Tolerance (at maximum output current)	-5%,+5%				
Protections	Short Circuit, Open Circuit Protection for LED + and LED -				
Features					
0-10V Dimming	See dim curve for detail.				
Environment & Approbation					
Operating Ambient Temp. Range	-20°C to +50°C				
Max Case Temperature (Tcase)	75°C, Tcase Life: 65°C				
Agency Approbations	UL8750, UL1310, cUL, Class P (UL, cUL)				
Electromagnetic Compliance	FCC 47 Part 15 Class A @277V input, Class B @120V input				
Audible Noise	<20dB Class A				
Weight	0.46Lbs / 0.21kgs				

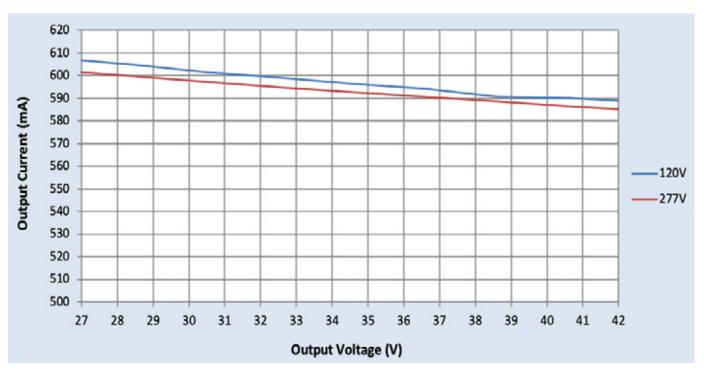
1. Advance CertaDrive LED drivers are manufactured to engineering standards correlating to a designed and average life expectancy of 35,000 hours of operation at maximum rated case temperature. Minimum 90% survivals based on MTBF modeling.

2. Note: power factor (PF) and total harmonic distortion (THD) may deviate under adverse mains voltage conditions outside nominal operation. Output current (I out) variation includes effects of line and load regulation, temperature variation and component tolerances.

Electrical Specifications

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lout Vs. Vout



Electrical Specifications

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0-10V Dimming Curve

Dimming source current from the driver: 450µA (@ 0<Vdim<10V)

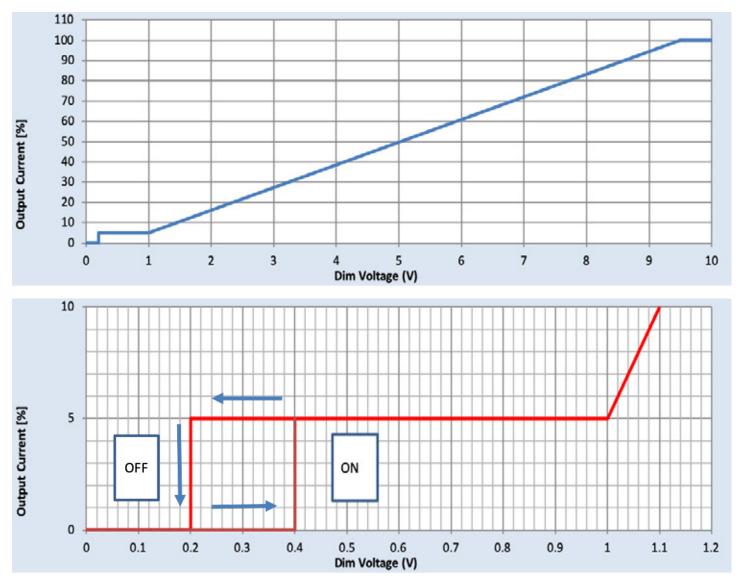
Minimum dim level: 5% of lout (Dimming to OFF)

Standby power <0.75W

Maximum output voltage on the dimming wires: 12V

Approved Dimmer List

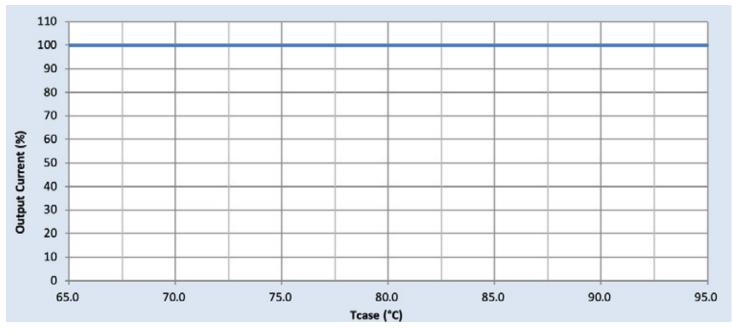
Manufacturer	Manufacturer Part Number		
Lutron	Visit www.lutron.com		
Leviton	IllumaTech IP7 series		
Philips	Sunrise - SR1200ZTUNV		



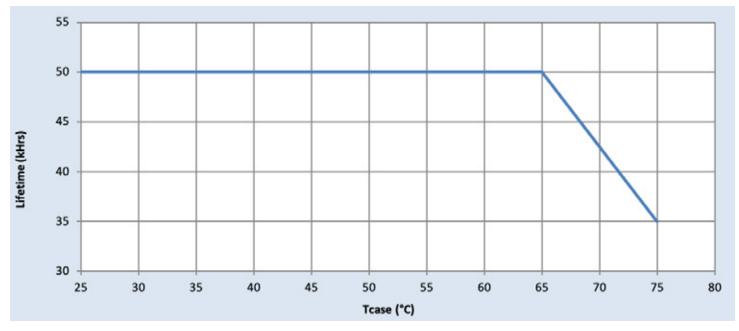
Electrical Specifications

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Output Current Vs. Driver Case Temperature



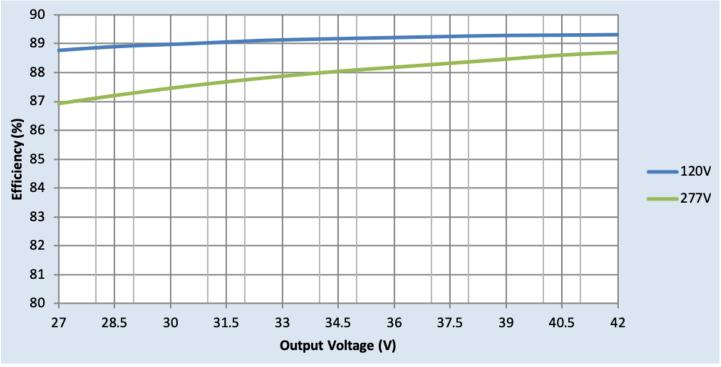
Driver Lifetime vs. Driver Case Temperature



Performance Characteristics

Based on measurements on a typical sample at 70 $^{\circ}$ C case. The accuracy of the measurements is within the tolerance of the measurement instruments.

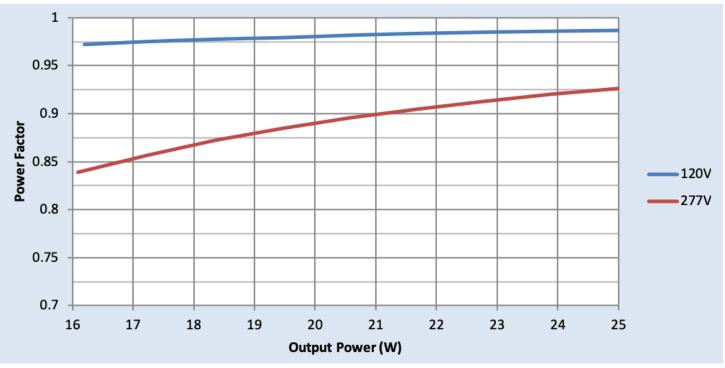
Efficiency Vs. Output Voltage



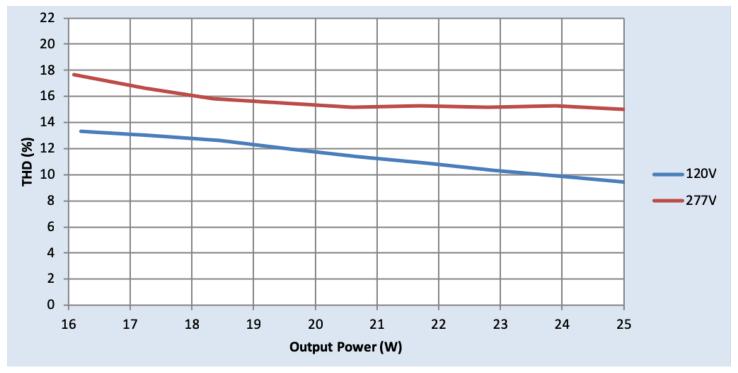
Performance Characteristics

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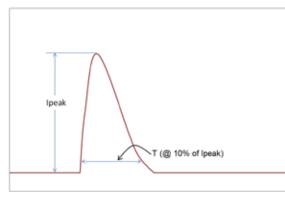
Power Factor Vs. Output Power



Total Harmonic Distortion (THD) Vs. Output Power



Inrush Current Info



Vin	lpeak	T (@ 10% of Ipeak)		
120 Vrms	4.1A	100µS		
277 Vrms	18.2A	108µS		

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)	Common Mode (L-G, N-G, L&N-G)					
100 kHz Ring Wave (w/t 30Ω)	2.5kV	2.5kV					

Isolation

Isolation	Input	Output	0-10V	Enclosure	
Input	-	2xU+1kV	2.5kV	2xU+1kV	
Output	2xU+1kV	-	Non-isolated	500V	
0-10V	2.5kV	Non-isolated	-	500V	
Enclosure	2xU+1kV	500V	500V	-	

U = Max input voltage

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Signify North America Corporation 400 Crossing Blvd, Suite 600 Bridgewater, NJ 08807 Telephone: 855-486-2216 Signify Canada Ltd. 281 Hillmount Road, Markham, ON, Canada L6C 2S3 Telephone: 800-668-9<u>008</u>

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