

CertaDrive

34W 0.72A 46V 0-10V (5% dim) 120-277V CI034C072V046CNN1



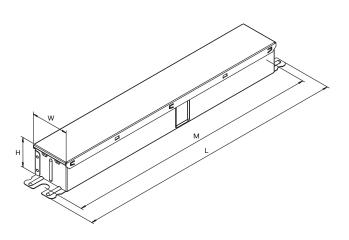
Philips Advance CertaDrive indoor LED drivers are designed to meet basic lighting needs. These dimmable drivers are offered with specific voltage-current settings and are, thus, optimized with specifications that are appropriately suited for the application, making LED conversion affordable.

Specifications

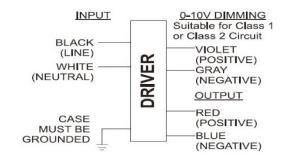
Input Voltage (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max Load and 70°C Case	Max Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection (Ring Wave, KV)	Envir. Protection Rating
120	34	30-46	0.72	85	80°C	0.33	40	<10%	>0.9	2.5	UL damp & dry
277	34	30-46	0.72	87	80 C	0.14	40	<15%	70.9	2.5	or damp & dry

Enclosure

	In. (mm)
Case Length	8.34 (212)
	, ,
Case Width	1.32 (33.5)
Case Height	1.06 (27)
Mounting Length	8.89 (226)
Overall Length	9.45 (240)



Wiring Diagram



Input and output use lead- wires.

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

Driver case must be grounded.

Dimming	Dimming Range	Minimum Output Current (A)	
0-10V Analog Class 1 and 2 Wiring	5% ~ 100%	0.036	

Features

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

Benefits

- \cdot Enables long life luminaire designs
- Allows operability in indoor (low-bay) ambient conditions
- \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

0				
Order Information				
Full Product Code	CI034C072V046CNN1M (Mid-Pack, 30pcs/Box)			
	12NC:929000763813			
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	30% max @ max lout			
(ripple = peak to average / average)	30% max lout			
Output Current Tolerance	<8%²			
(at maximum output current)				
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) ³	80°C, Tcase Life: 65°C			
Agency Approbations	UL 8750, UL 1310, CSA 250.13, Class P (UL, CSA, ETL)			
Electromagnetic Compliance	FCC Title 47 Part 15 Class A			
Audible Noise	<24dB Class A			
Weight	0.51Lbs / 0.23kgs			

l. Philips 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.

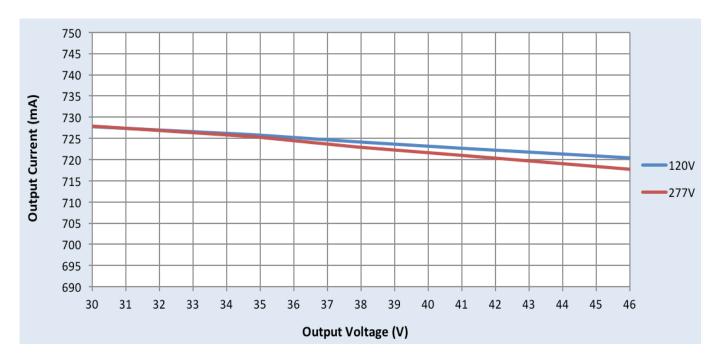
^{2.} Note: power factor (PF) and total harmonic distortion (THD) may deviate under adverse mains voltage conditions outside nominal operation. Output current (I out) variation includes effects of line and load regulation, temperature variation and component tolerances.

^{3.} For Tc point location, please refer to the Philips Advance CertaDrive design-in guide.

Electrical Specifications

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Iout Vs. Vout



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0-10V Dimming Curve

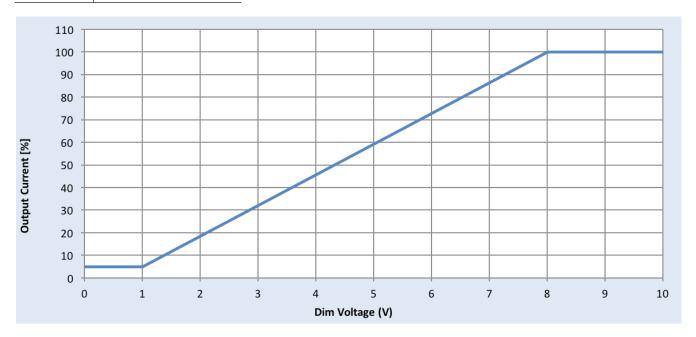
Dimming source current from the driver: 150µA (@ 0<Vdim<8V)

Minimum dim level: 5% of lout

Maximum output voltage on the dimming wires: 12V

Approved Dimmer List

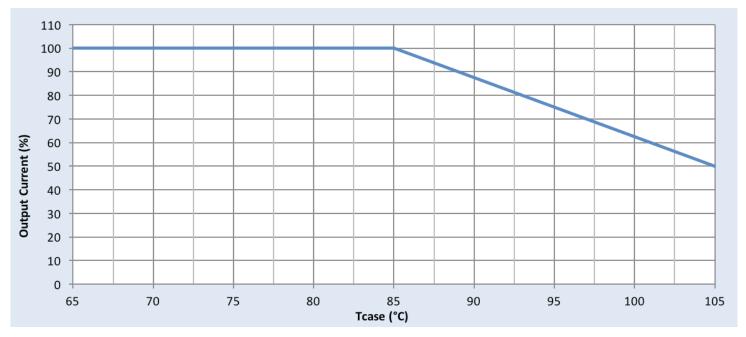
Manufacturer	Manufacturer Part Number		
Lutron	Visit www.lutron.com/ advance for a list of dimmers (Mark VII) that will work with this driver		
Leviton	IllumaTech IP7 series		
Philips	Sunrise - SR1200ZTUNV		



Electrical Specifications

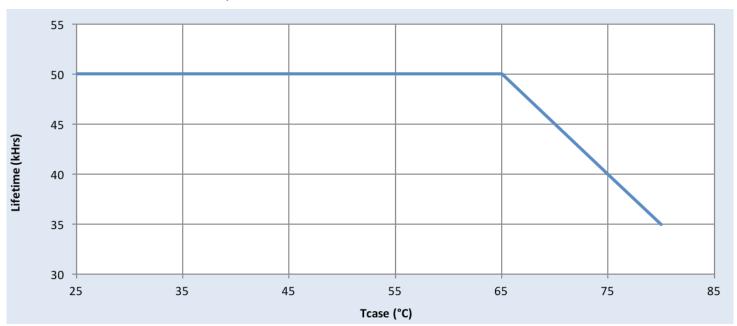
All the specifications are typical and at 25°C Tcase unless specified otherwise.

Output Current Vs. Driver Case Temperature



Note: There is $\pm 5^{\circ}$ C tolerance on the driver case temperature.

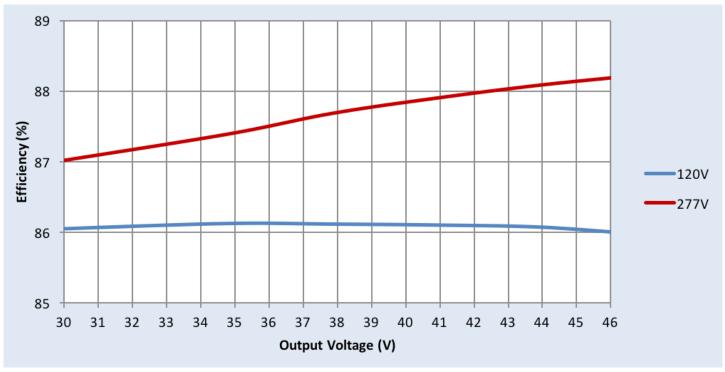
Driver Lifetime Vs. Driver Case Temperature



Performance Characteristics

Based on measurements on a typical sample at 70° C case. The accuracy of the measurements is within the tolerance of the measurement instruments.

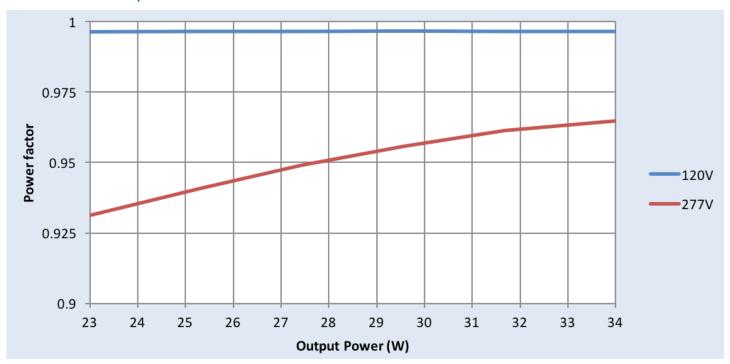
Efficiency Vs. Output Voltage



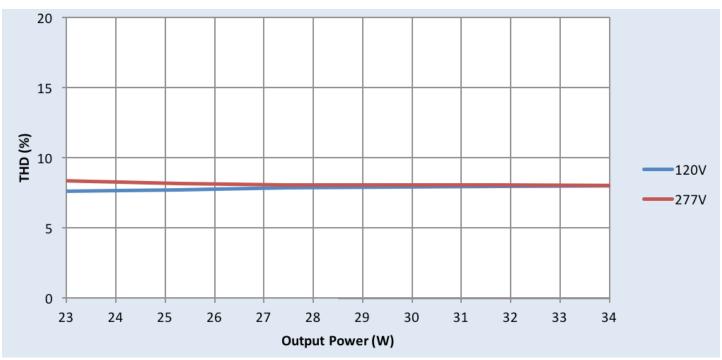
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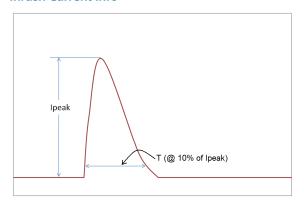
Power Factor Vs. Output Power



Total Harmonic Distortion (THD) Vs. Output Power



Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)	
120 Vrms	8A	6µS	
277 Vrms	21A	8μS	

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	NA	2xU+1kV	2.5kV	2xU+1kV
Output	2xU+1kV	NA	2.5kV	2xU+1kV
0-10V	2.5kV	2.5kV	NA	2xU+1kV
Enclosure	2xU+1kV	2xU+1kV	2xU+1kV	NA

U = Max working voltage

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