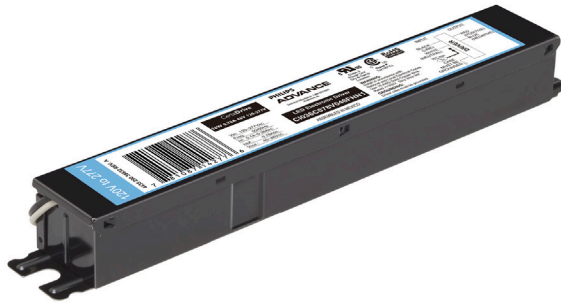


**PHILIPS  
ADVANCE**

LED Driver

CertaDrive

36W 0.78A 46V 120-277V  
CI036C078V046FNN1



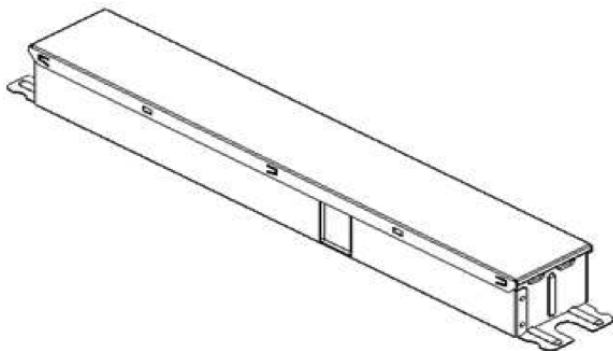
Philips Advance CertaDrive indoor LED drivers are designed to meet basic lighting needs. These drivers are offered with specific voltage-current settings and are, thus, optimized with specifications that are appropriately suited for the application, making LED conversion even more affordable.

**Specifications**

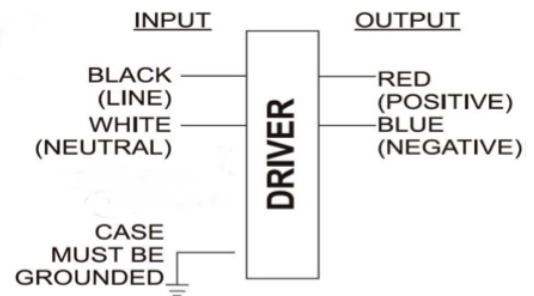
Input Voltage (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max Load and 70°C Case	Max Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection (Ring Wave, KV)	Envir. Protection Rating
120	36	40-46	0.78	86	75°C	0.38	42	<20%	>0.9	2.5	UL damp & dry
277				86		0.14		<20%			

**Enclosure**

	In. (mm)
Case Length	8.65 (212)
Case Width	1.37 (33.5)
Case Height	1.1 (27)
Mounting Length	8.90 (226)
Overall Length	9.5 (240)



**Wiring Diagram**



Input and output use lead- wires.  
Lead-wires are 18AWG 105C/600V solid copper.  
Rated >=300V.  
Strip wire 3/8".  
Driver case must be grounded.

# CertaDrive 36W 0.78A 46V 120-277V (Non Dim)

## Features

- 35,000+ hour lifetime<sup>1</sup>
- Excellent thermal performance
- High Power Factor & Low THD

## Benefits

- Enables long life luminaire designs
- Allows operability in indoor (low-bay) ambient conditions
- 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	CI036C078V046FNN1M (Mid-Pack, 30pcs/Box)
Line Frequency	50/60Hz
Min. Mains Voltage Operational	108 Vac
Max. Mains Voltage Operational	305 Vac
Output Information	
Maximum Open Circuit Voltage	60Vdc
Output Current Ripple (ripple = peak to average / average)	30% max @ max Iout
Output Current Tolerance (at maximum output current)	±11% (see note below)
Protections	Short Circuit, Open Circuit Protection for LED + and LED –
Features	
0-10V Dimming	Non Dimmable
Environment & Approbation	
Operating Ambient Temp. Range	-20°C to +50°C
Max Case Temperature (Tcase)	75°C
Agency Approbations	UL 8750, UL 1310, CSA 250.13, CSA Class P
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Audible Noise	<24dB Class A
Weight	0.55Lbs / 0.25 kgs

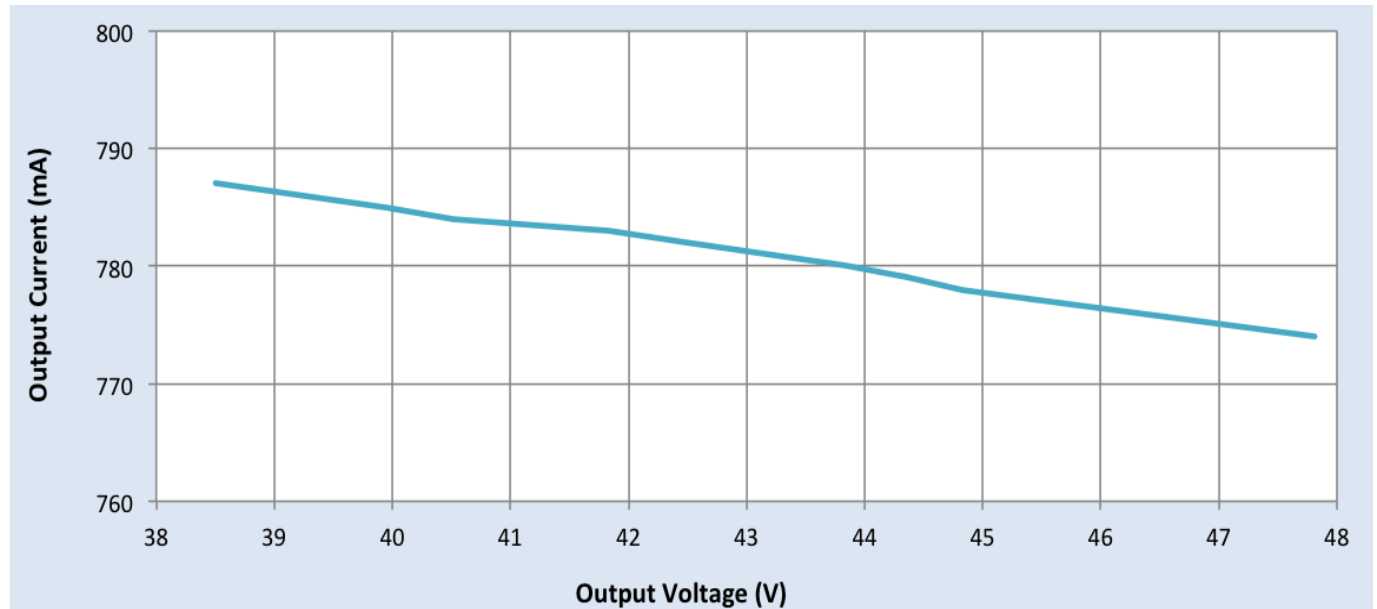
1. Philips Advance CertaDrive LED drivers are manufactured to engineering standards correlating to a designed and average life expectancy of 35,000 hours of operation at maximum rated case temperature. Minimum 90% survivals based on MTBF modeling. Note: Power Factor (PF) and Total Harmonic Distortion (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.

# CertaDrive 36W 0.78A 46V 120-277V (Non Dim)

## Electrical Specifications

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

### I<sub>out</sub> vs. V<sub>out</sub>

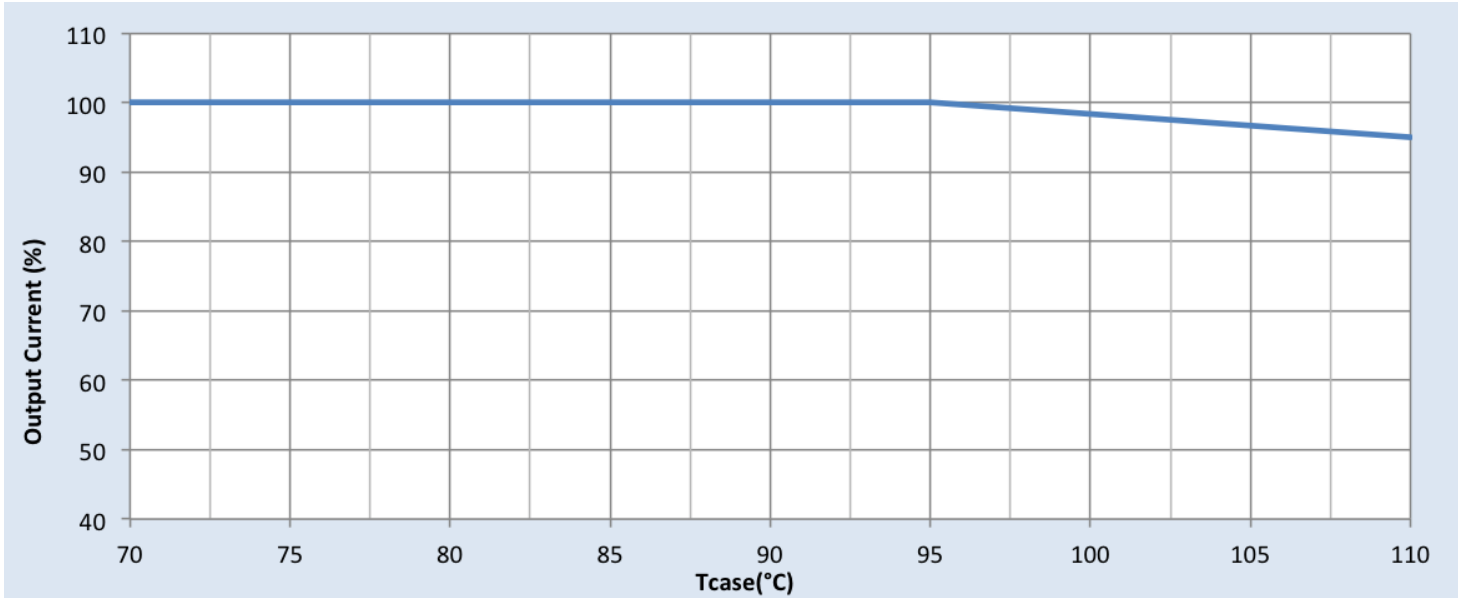


# CertaDrive 36W 0.78A 46V 120-277V (Non Dim)

## Electrical Specifications

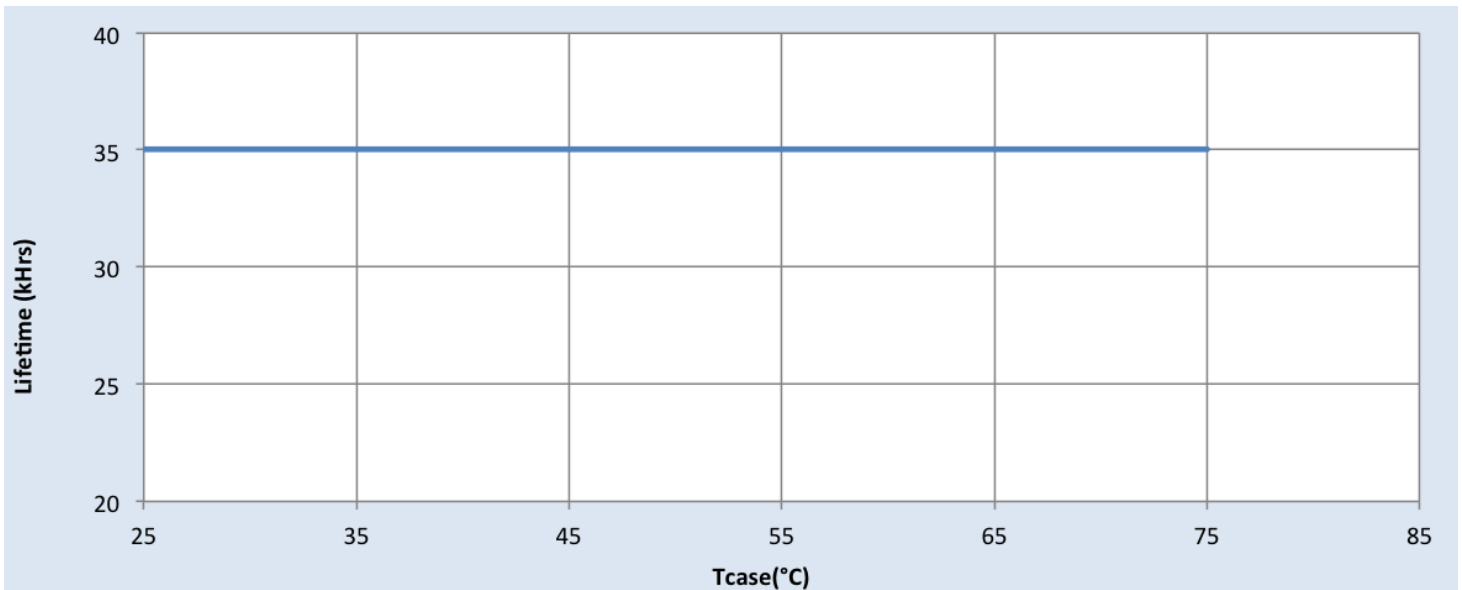
All the specifications are typical and at 25°C Tcase unless specified otherwise.

### Output Current Vs. Driver Case Temperature



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

### Driver Lifetime vs. Driver Case Temperature

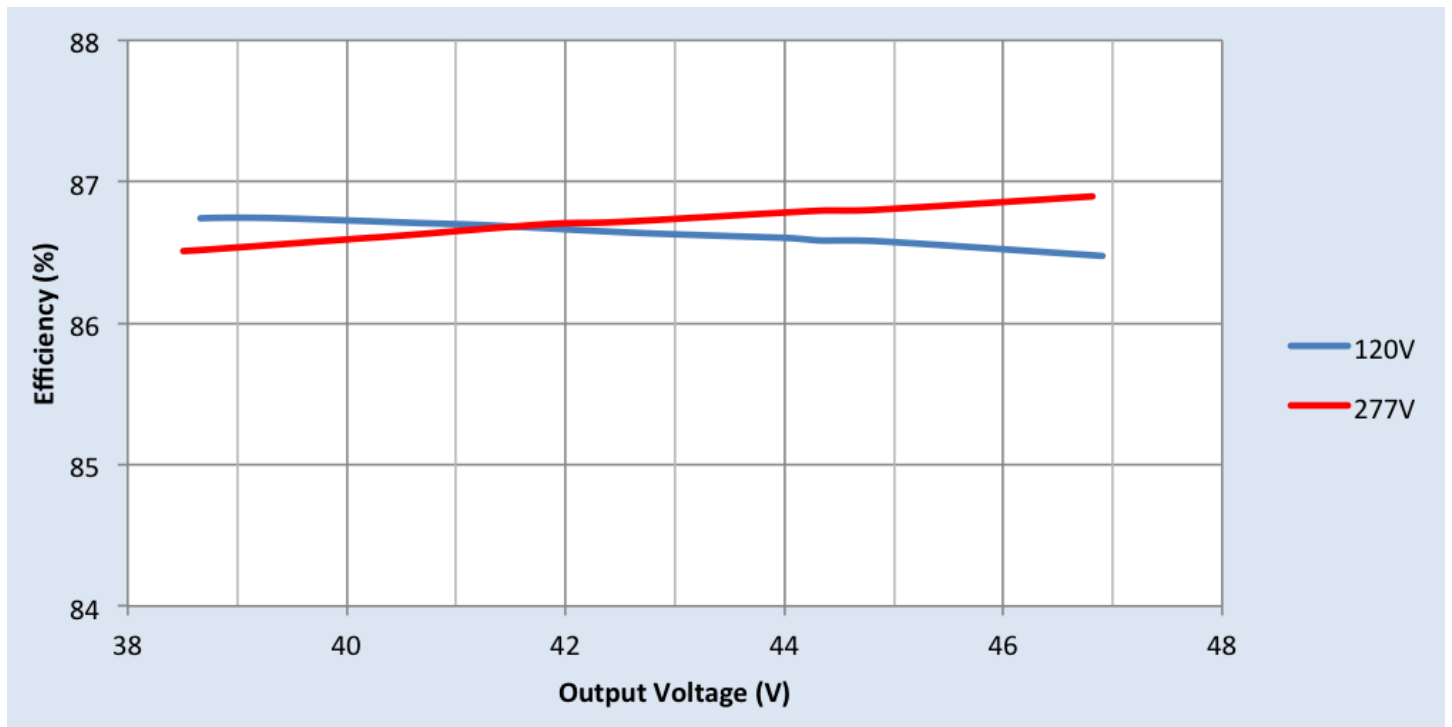


# CertaDrive 36W 0.78A 46V 120-277V (Non Dim)

## 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

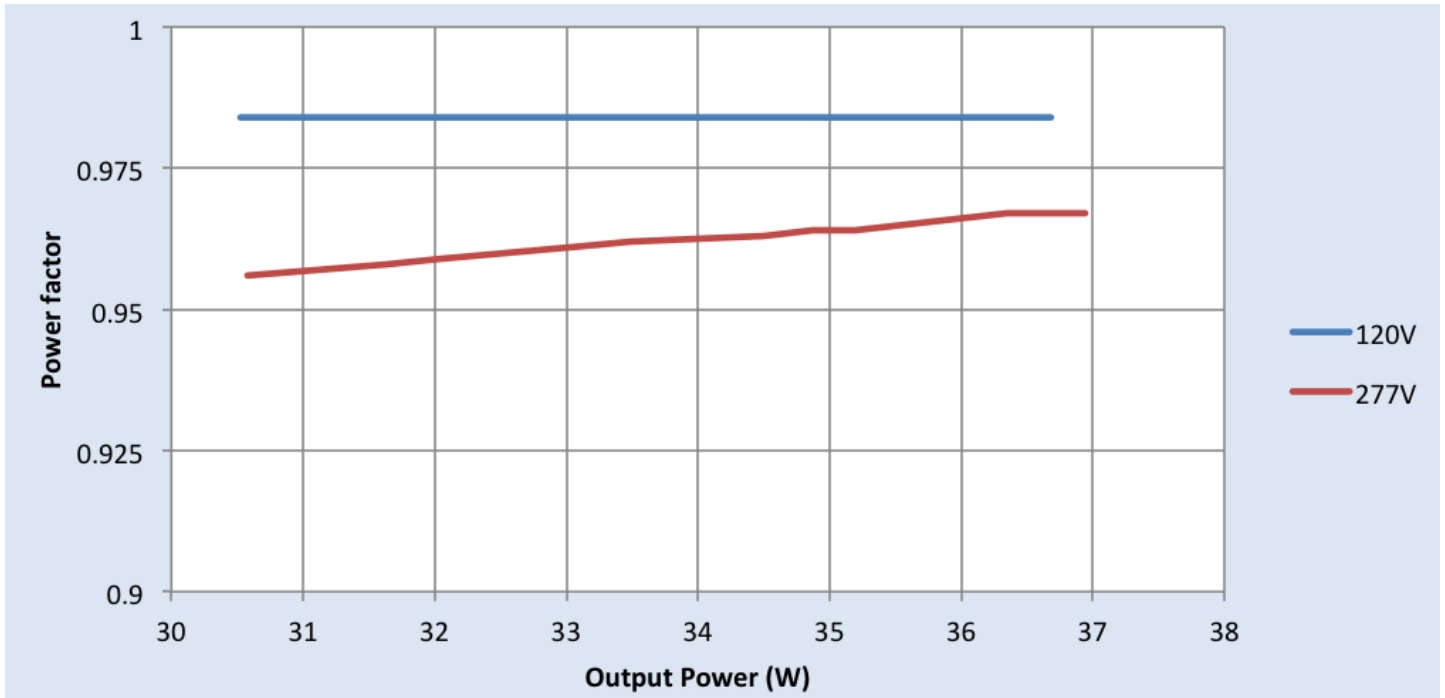


# CertaDrive 36W 0.78A 46V 120-277V (Non Dim)

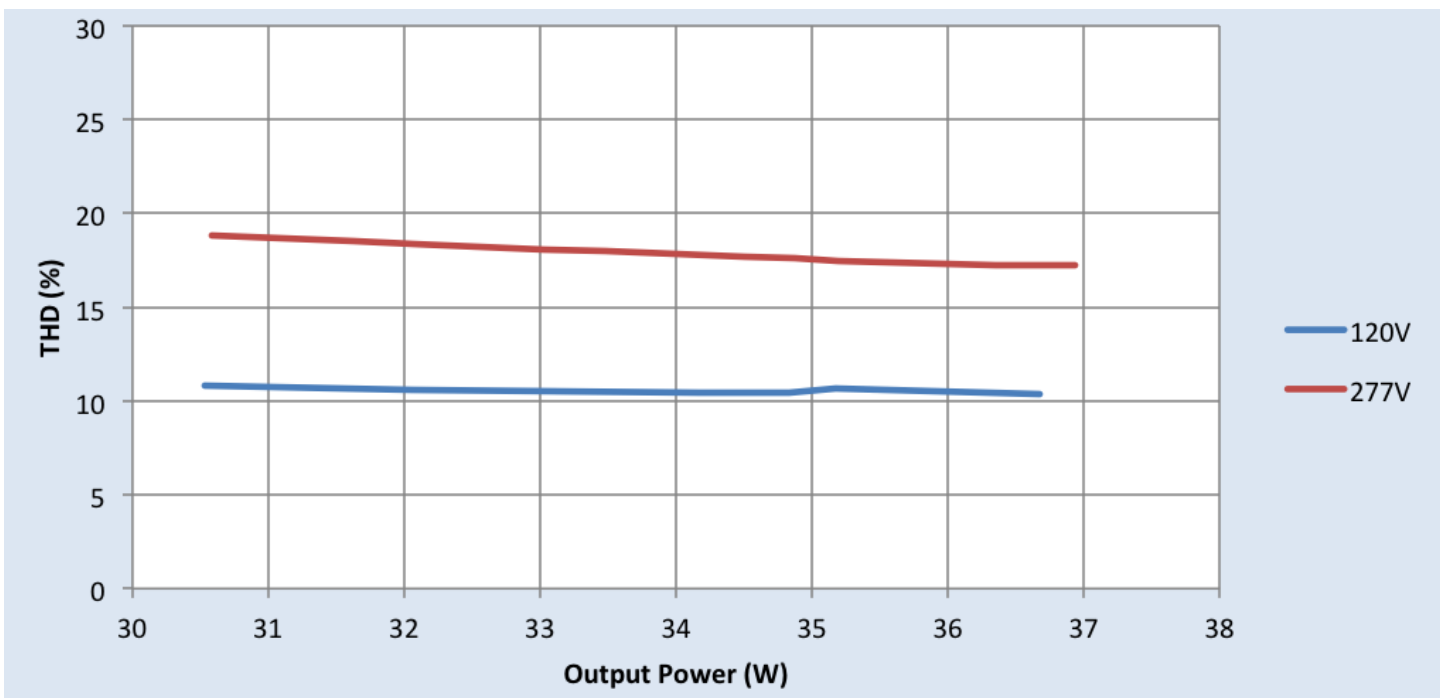
## Performance Characteristics

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

### Power Factor Vs. Output Power

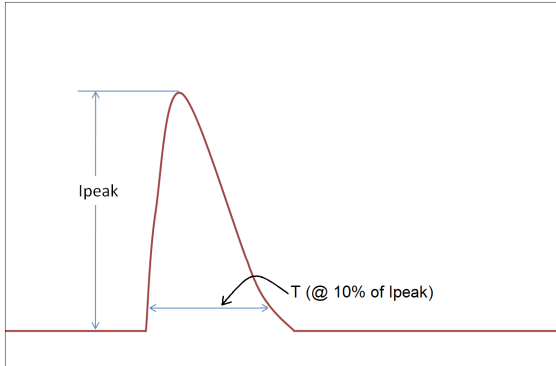


### Total Harmonic Distortion (THD) Vs. Output Power



# CertaDrive 36W 0.78A 46V 120-277V (Non Dim)

## Inrush Current Info



V <sub>in</sub>	I <sub>peak</sub>	T (@ 10% of I <sub>peak</sub> )
120 Vrms	8A	35μS
277 Vrms	22A	35μS

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	Enclosure
Input	NA	2xU+1kV	2xU+1kV
Output	2xU+1kV	NA	2xU+1kV
Enclosure	2xU+1kV	2xU+1kV	NA

U = Max input voltage

## UL Conditions of Acceptability

Please contact your Philips representative for a copy of the latest UL Conditions of Acceptability (COA).

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Philips Lighting North America Corporation  
10275 W. Higgins Road, Rosemont IL 60018  
Tel: 800-322-2086 Fax: 888-423-1882  
Customer/Technical Service: 800-372-3331  
OEM Support: 866-915-5886

Philips Lighting Canada Ltd.  
281 Hillmount Rd, Markham, ON, Canada L6C 2S3  
Tel. 800-668-9008