



# Xitanium XI300C150V300BSR1

300W 120–277V 0.1–1.50A 0–10V with SimpleSet

## Features

- 50,000+ hour lifetime<sup>1</sup>
- Programmable output current through SimpleSet
- Large operating window

## Benefits

- Enables long life luminaire designs
- Fast and simple way of programming
- Enables fixture designs with wide variety of loads and current

## Application

- Area
- Roadway
- Floodlights

1. Advance Xitanium LED Drivers are manufactured to engineering standards correlating to a designed and average life expectancy of 50,000 hours of operation at maximum rated case temperature. Minimum 90% survivals based on MTBF modeling.

## Electrical Specifications

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

## Product Data

Order Information	
Full Product Code	XI300C150V300BSR1M (Mid-Pack, 4pcs/Box); 12NC: 929000729813
Line Frequency	50/60Hz
Min. Mains Voltage Operational	108Vac
Max. Mains Voltage Operational	305Vac
Output Information	
Maximum Open Circuit Voltage	400Vdc
Output Current Ripple (ripple = peak to average / average)	<= 15% at maximum output current Low frequency (<=120 Hz) content <5%
Output Current Tolerance (In the performance window)	<5%
Protections	Short Circuit, Open Circuit Protection for LED + and LED -, Thermal Foldback
Features	
0–10V Dimming	150µA source current from driver. See dim curve for detail.
AOC (Adjustable Output Current)	100mA to 1500mA via SimpleSet (Refer to Operating Window)
Adjustable Minimum Dim Level	10% or higher
Environment & Approbation	
Operating Ambient Temp. Range	-40°C to +55°C
Max Case Temperature (Tcase)	85°C
Environmental Protection Rating	UL dry and damp, Type HL
Agency Approbations	UL8750
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Audible noise	<24dB Class A
Weight	4.0Lbs/1.8kgs

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### 0-10V Dimming Curve

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

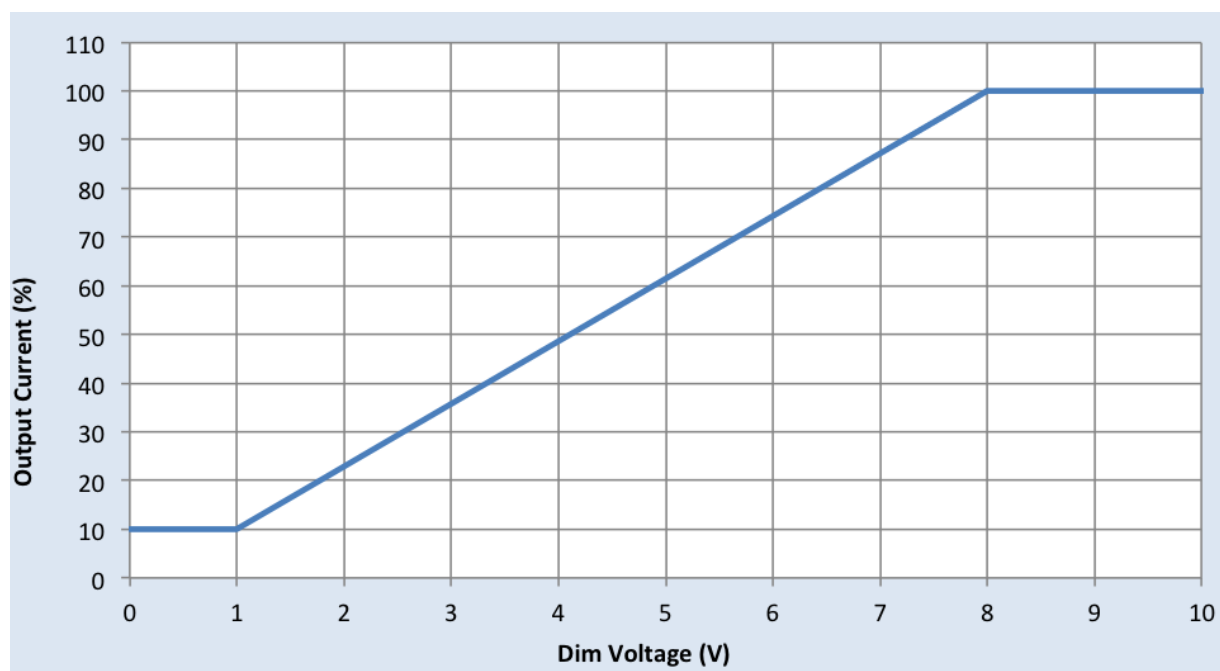
Minimum Dim Level: Factory default 10% of lout (minimum 100mA), can be programmed to a higher level via SimpleSet

Maximum output voltage on the dimming wires: 12V

The dimming lead leakage current is 0.01mA. The maximum number of drivers that can be connected in parallel to one dimming control circuit is based on this dimming lead leakage current and the calculation is described in the corresponding Design-in Guide.

### Approved Dimmer List

Manufacturer	Manufacturer Part Number
Lutron	Visit <a href="http://www.lutron.com/advance">www.lutron.com/advance</a> for a list of dimmers (Mark VII) that will work with this driver
Leviton	IllumaTech IP7 series
Advance	Sunrise - SR1200ZTUNV



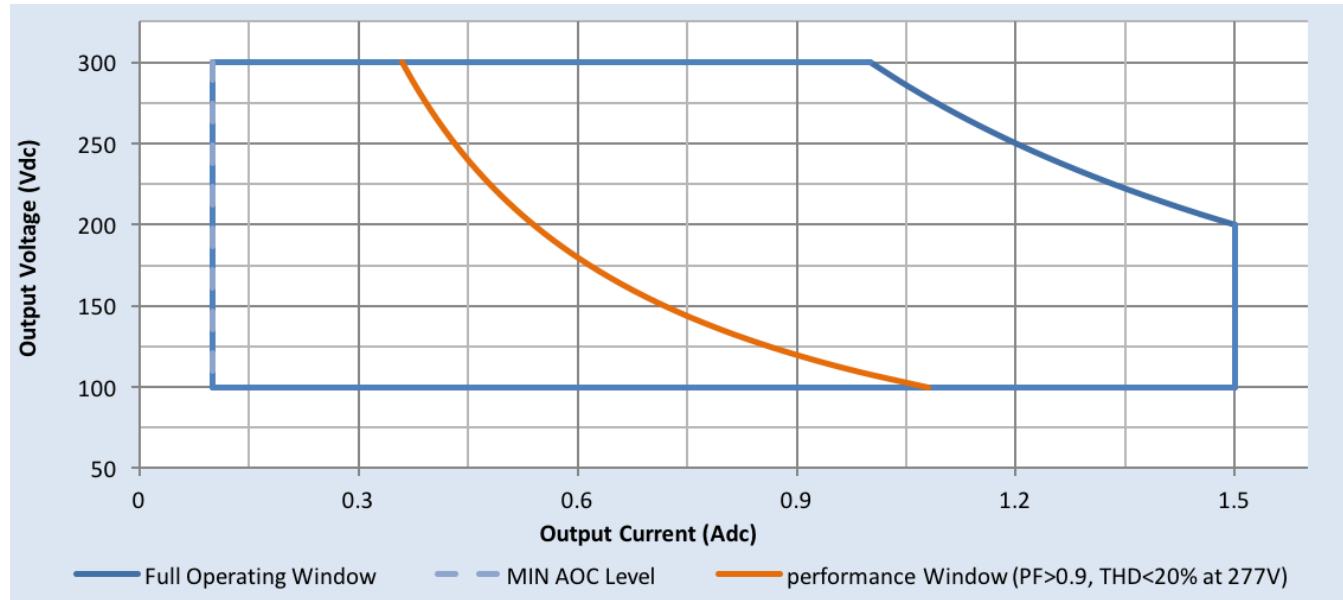
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## Operating Window



## Notes

1. Factory default output current is 1.05A.
2. For 10% dimming output current setting through AOC should be >1A.

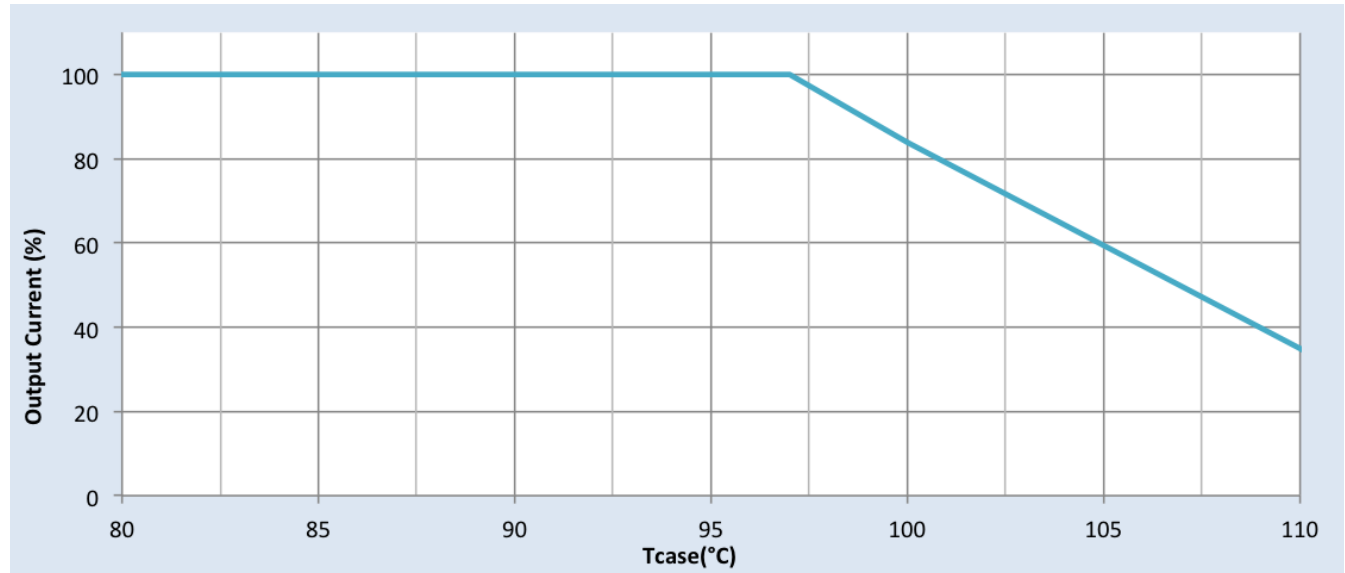
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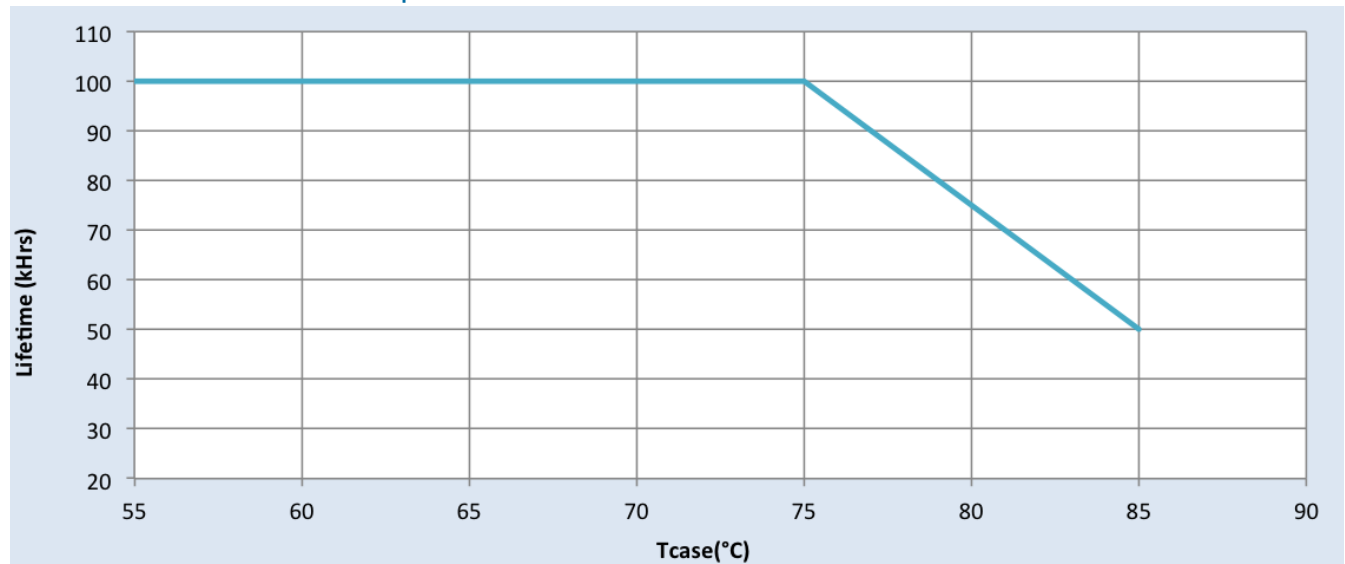
## Output Current Vs. Driver Case Temperature



## Notes

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

## Driver Lifetime Vs. Driver Case Temperature



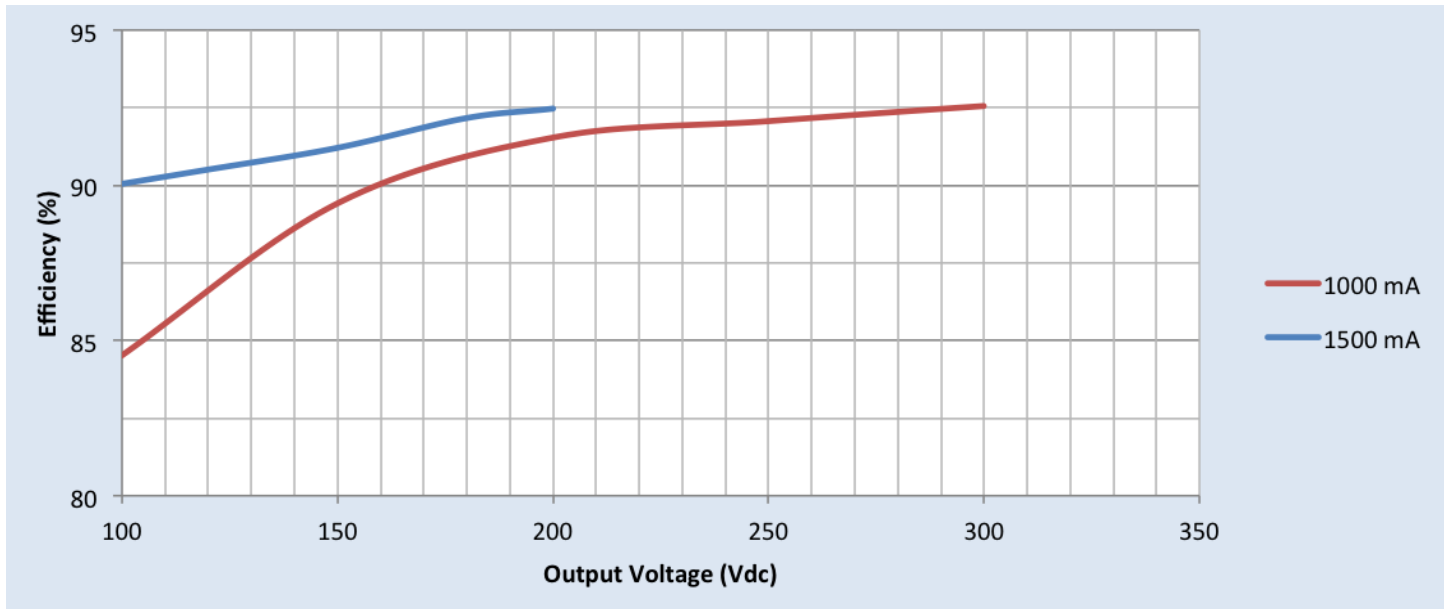
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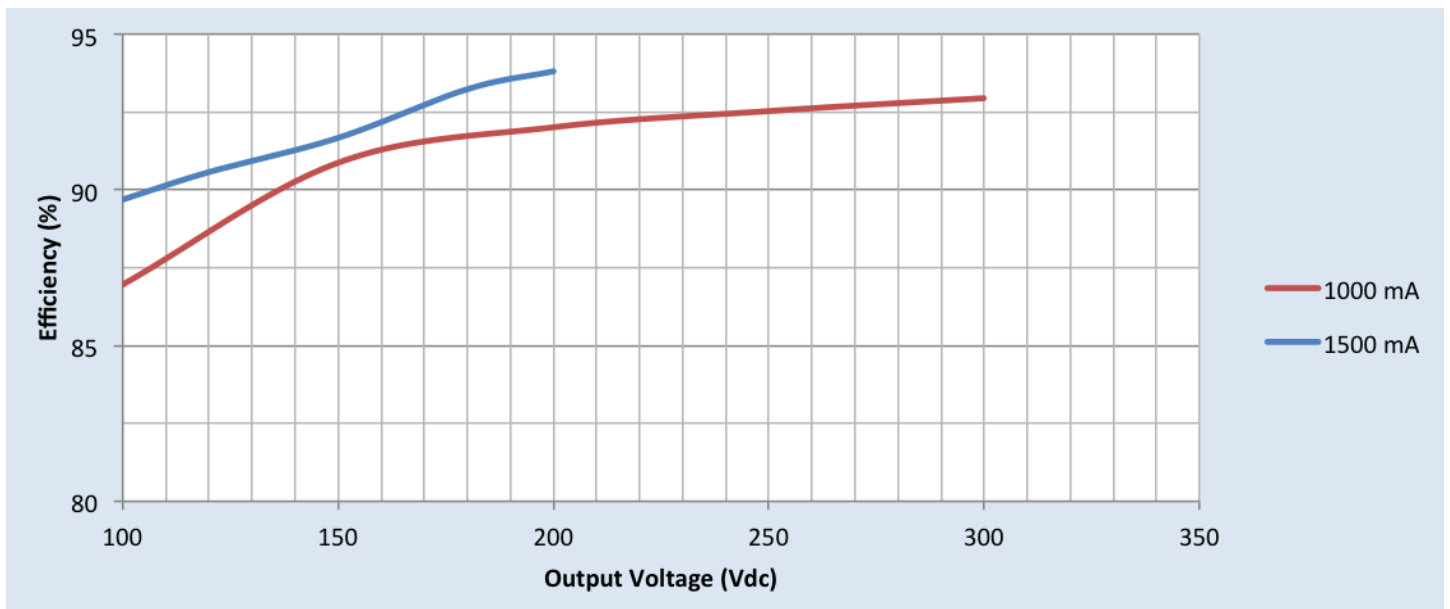
## Performance Characteristics

Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.

### Efficiency Vs. Output Voltage at 120Vac



### Efficiency Vs. Output Voltage at 277Vac



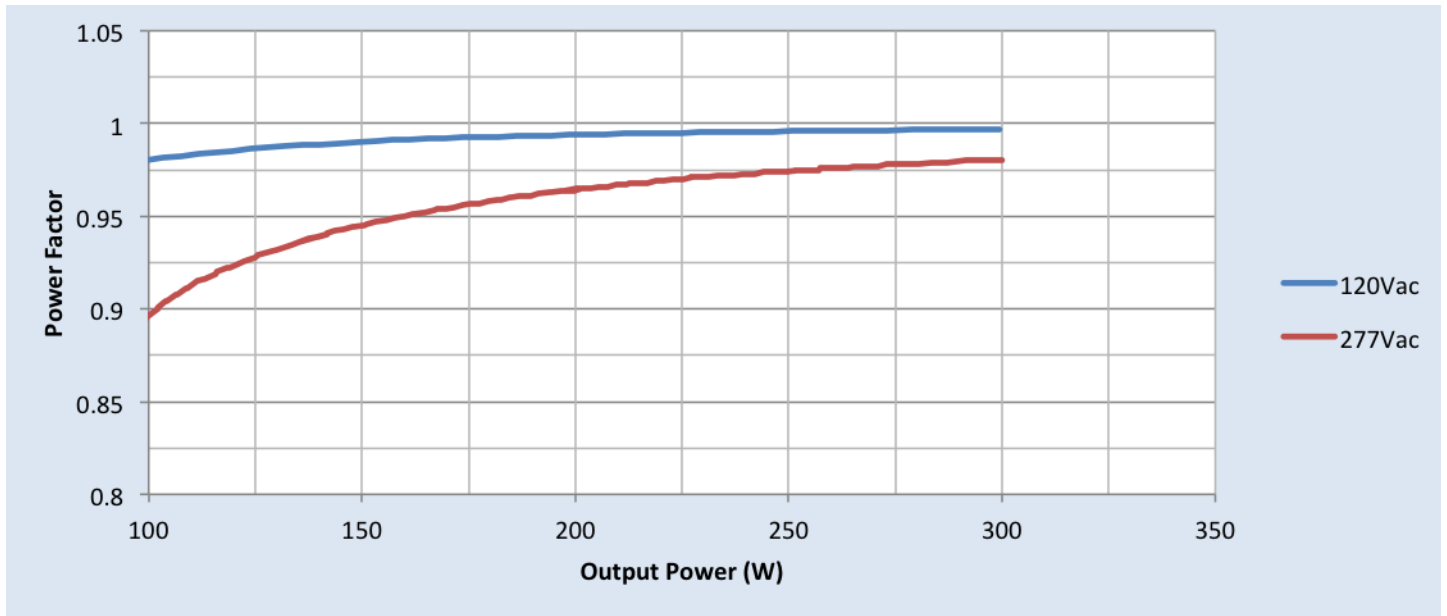
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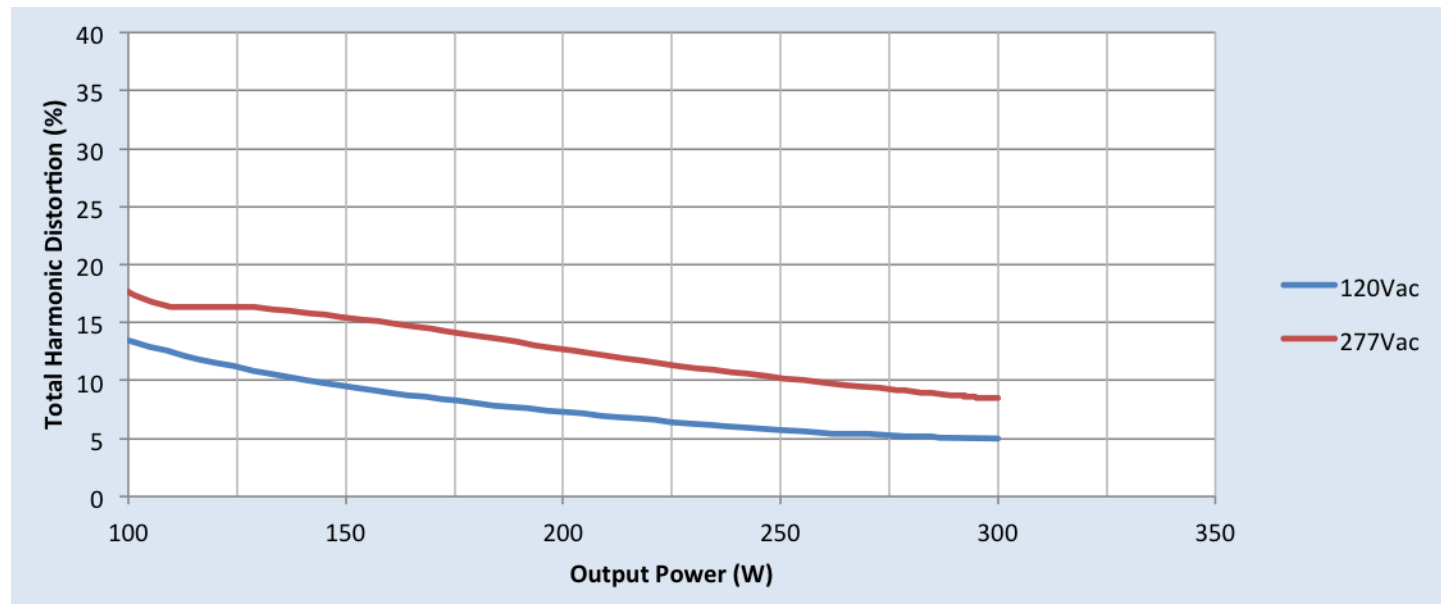
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### Power Factor Vs. Output Power



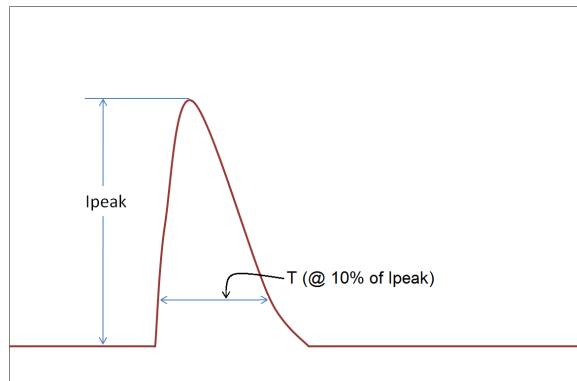
### Total Harmonic Distortion (THD) Vs. Output Power



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## Inrush Current Info



$V_{in}$	$I_{peak}$	$T$ (@ 10% of $I_{peak}$ )
120 Vrms	107A	180 $\mu$ S
277 Vrms	289A	220 $\mu$ S

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)
1.2/50 $\mu$ s Combination Wave (w/t 2 <sub>2</sub> )	4kV	4kV

## Isolation

Isolation	Input	Output	0-10V (Class 2)	Enclosure
Input	NA	2xU+1kV	2xU+1kV	2xU+1kV
Output	2xU+1kV	NA	2xU+1kV	2xU+1kV
0-10V (Class 2)	2xU+1kV	2xU+1kV	NA	2xU+1kV
Enclosure	2xU+1kV	2xU+1kV	2xU+1kV	NA

U = Max input voltage

## UL Conditions of Acceptability

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

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