

ADVANCE

by @signify

LED Driver

Xitanium

XI095C275V054BSS2



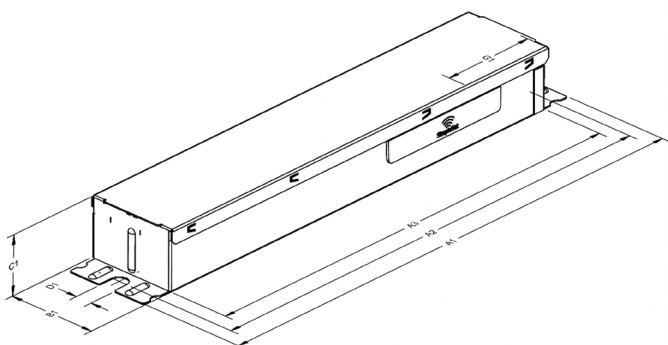
Long-lasting and low maintenance, LED-based light sources are an excellent solution for all lighting applications. For optimal performance, these solutions require reliable drivers matching the long lifetime of the LEDs. The Advance Xitanium LED Outdoor Driver portfolio offers a range of products specially designed to operate LED solutions in outdoor applications. These drivers are designed for hard-wired integration into outdoor luminaires for the most rugged applications. They operate to specification under wide temperature and electrical ranges to ensure reliability.

Specifications

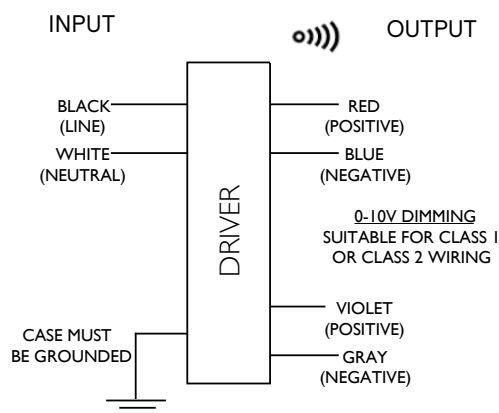
Input Voltage (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max Load and 75°C Case	Max Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection (Combi-Wave, KV)	Envir. Protection Rating
120	95	20-54	0.1 - 2.75	88.4	Life - 85°C UL - 90°C	0.92	110	<10%	>0.95	6	UL damp & dry and Type HL
277				89.8		0.39					

Enclosure

	In. (mm)
Overall Length (A1)	9.45 (240)
Mounting Hole Distance (A2)	8.89 (225.8)
Case Length (A3)	8.40 (213.4)
Case Width (B1)	1.69 (43)
Case Height (C1)	1.13 (28.8)
Mounting Hole Diameter (D1)	0.31 (7.9)
Center of Simpleset Antenna (G1)	1.77 (45)



Wiring Diagram



Dimming	Dimming Range (with specified dimmers)	Minimum Output Current (A)
0-10V Analog Class 1 or Class 2 Wiring	5% ~ 100%	0.03



Intertek
Class P
Conforms to UL STD 8750
Certified to CAN/CSA STD
C22.2 No. 250.13



Class P
LED class 2 output
For Dry and Damp Location



Xitanium XI095C275V054BSS2

95W 0.1–2.75A 0–10V Dimming

Features

- 50,000+ hour lifetime¹
- Programmable output current through SimpleSet
- Large operating window
- 6kV combi-wave surge rating to comply with ANSI C82.77-5 CAT C low

Benefits

- Designed for Class 2 luminaires
- Fast and simple way of programming
- Industry leading dimming range for 95W Class 2 product
- No external surge protection required to pass C82.77-5 CAT C low

Application

- High-bay and mid-bay fixtures
- Area
- Roadway
- Parking garages
- Floodlights

Electrical Specifications

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

Product Data

Order Information	
Full Product Code	XI095C275V054BSS2
Product 12NC	929002720713
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)	15% max @ max lout (Low frequency ripple (≤120Hz) content <5%)
Output Current Tolerance (in performance window)	<5%
Protections	Short Circuit, Open Circuit Protection for LED + and LED – and Temperature Foldback
Features	
0–10V Dimming	Typ 150μA (Min. 100uA, Max. 250uA) source current from driver. See dim curve for detail.
AOC (Adjustable Output Current)	0.1A–2.75A via SimpleSet (Factory Default at 2.3A)
Additional SimpleSet Configurable Features	Adjustable Min Dim level, Adjustable Lumen Output, Adjustable Lumen Output Min, OEM Write Protection, Advanced Internal Thermal Protection (DTL)
Environment & Approbation	
Operating Ambient Temp. Range	–40°C to +55°C
Max Case Temperature (Tcase)	90°C
Agency Approbations	UL8750, Class P (UL, CSA, ETL)
Electromagnetic Compliance	FCC Title 47 Part 15 Class A, CSA 250.13
Audible Noise	<24dB Class A
Weight	1.5 Lbs / 0.68 kgs

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 MTTF modeling.

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95W 0.1-2.75A 0-10V Dimming

Electrical Specifications

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0-10V Dimming Curve

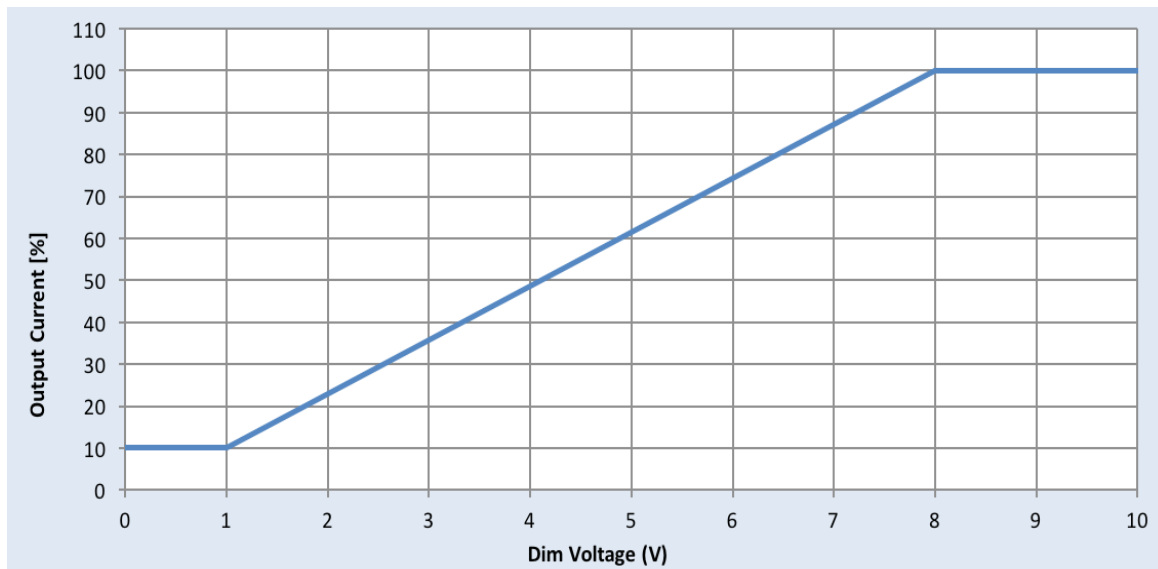
Dimming source current from the driver: 150µA (Min 100uA, Max 250uA @ 0<Vdim<8V)

Minimum dim level: Factory default 10% of Iout setting as default

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
Advance	Sunrise - SR1200ZTUNV



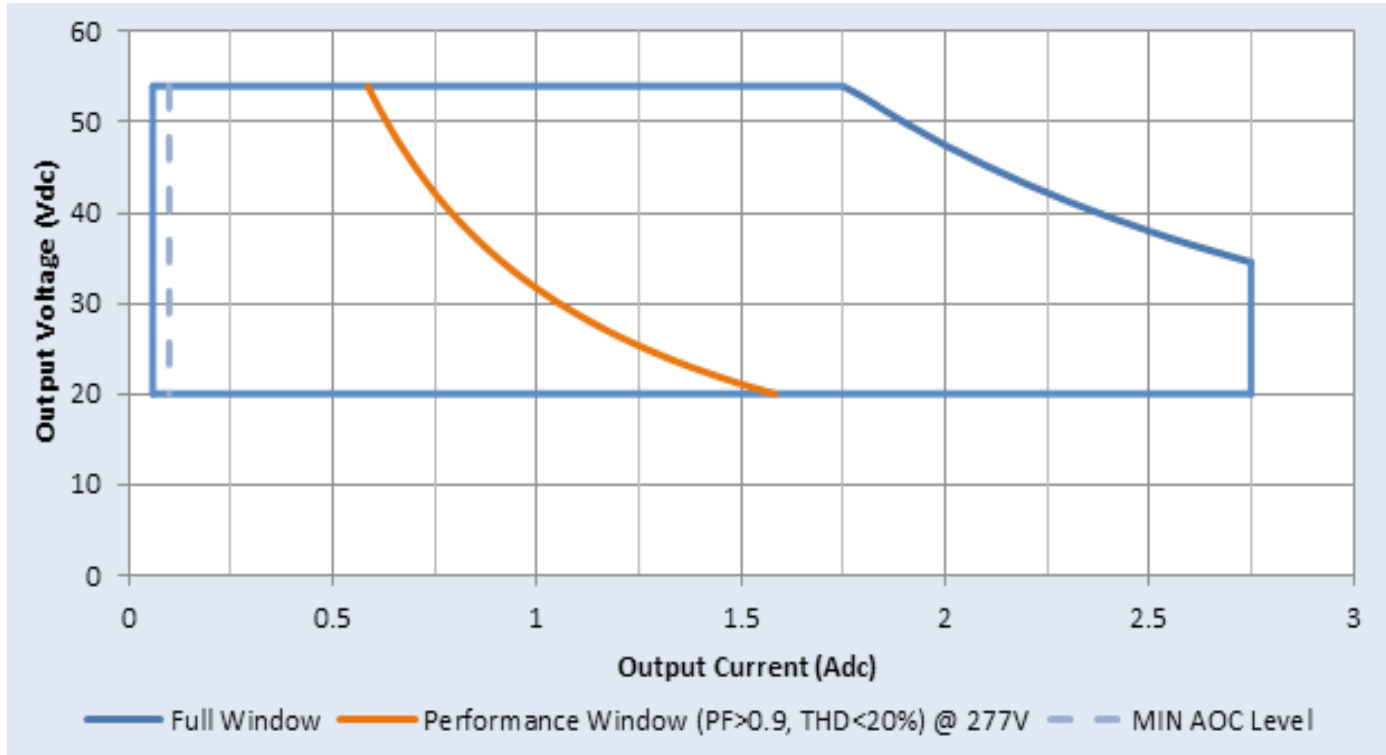
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Electrical Specifications

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Driver Output Window



Notes

1. Factory default output current is 2.3A.
2. To get a 100% to 10% dimming range, the output current setting through AOC should be $\geq 300\text{mA}$.
3. Factory default setting for the dimming range is 100% to 10%. However, the minimum dim level can be set between 5% and 100% through MultiOne and SimpleSet.

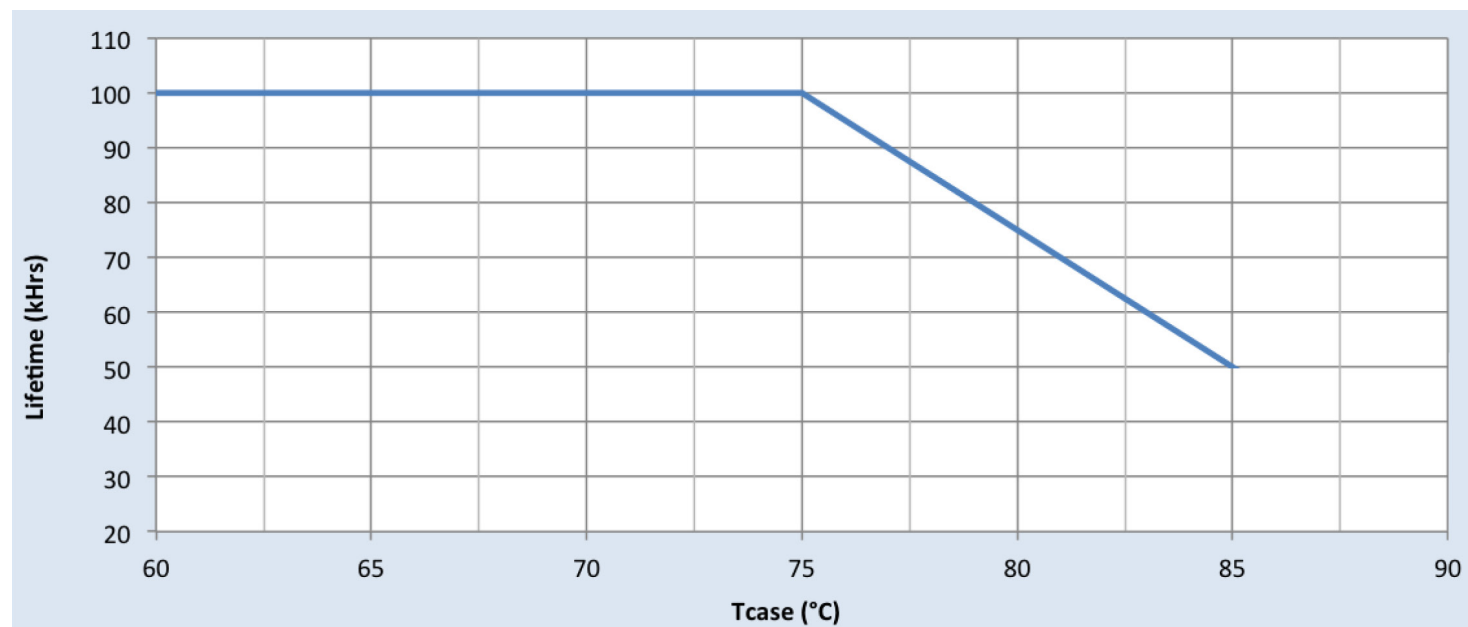
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95W 0.1–2.75A 0–10V Dimming

Electrical Specifications

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Driver Lifetime Vs. Driver Case Temperature



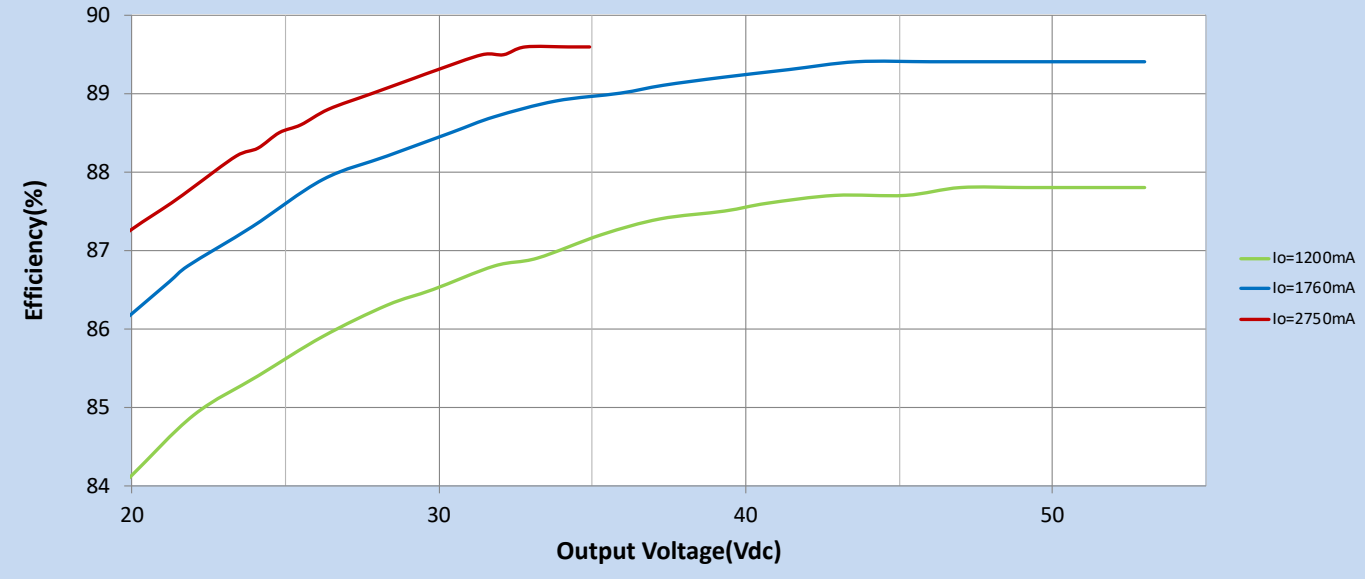
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95W 0.1-2.75A 0-10V Dimming

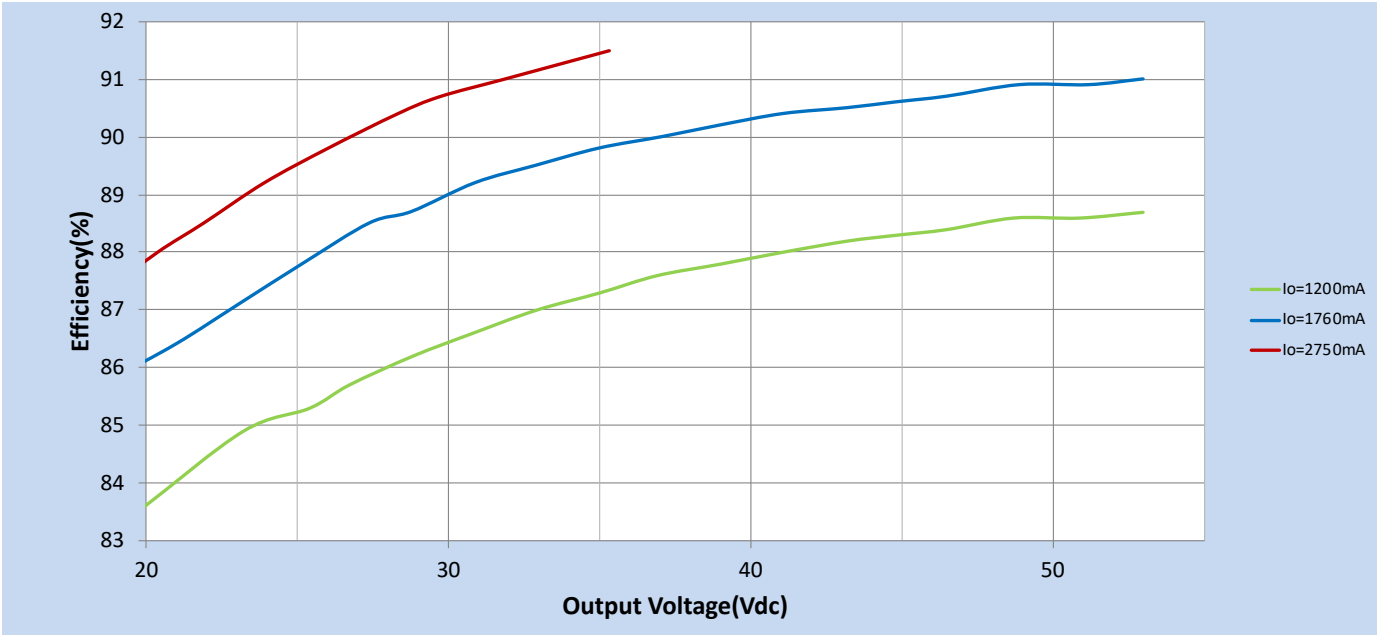
Performance Characteristics

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 at 120Vac



Efficiency Vs. Output Voltage at 277Vac



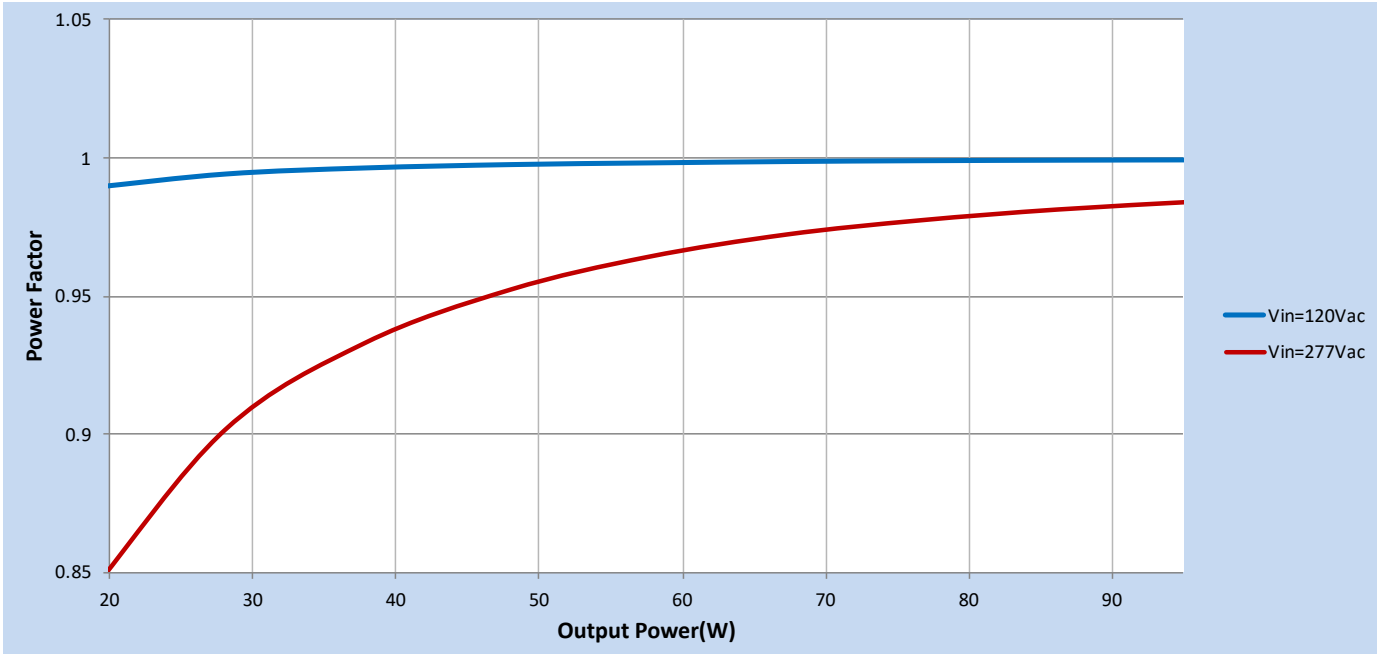
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95W 0.1-2.75A 0-10V Dimming

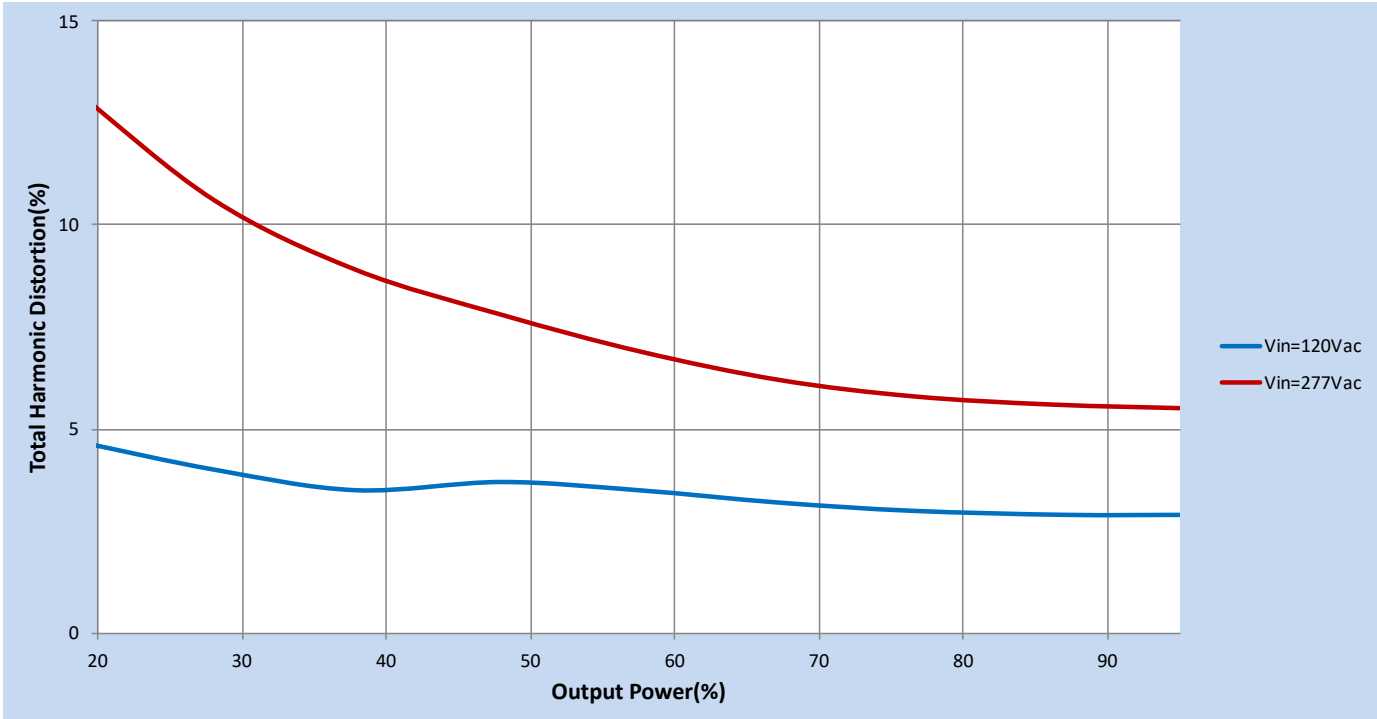
Performance Characteristics

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Power Factor Vs. Output Power



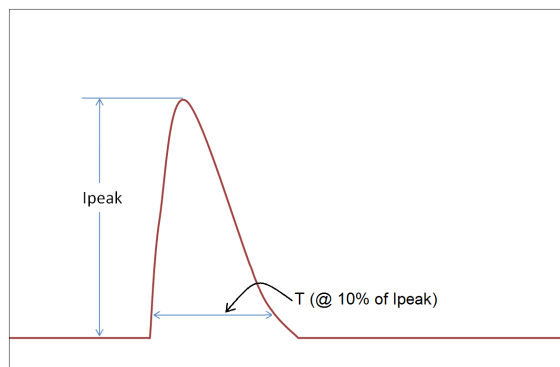
Total Harmonic Distortion (THD) Vs. Output Power



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95W 0.1-2.75A 0-10V Dimming

Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)
120 Vrms	39.1A	127μS
277 Vrms	96.7A	151μS

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)
Combination Wave (w/t 2Ω)	6kV	6kV

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	2.5kV
Enclosure	2xU+1kV	2xU+1kV	2.5kV	NA

U = Max. input voltage

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