



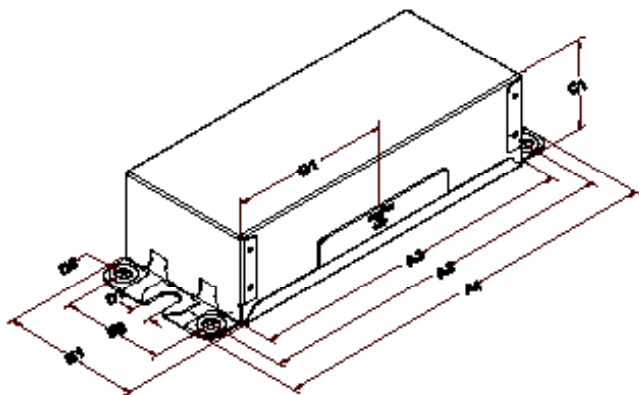
Advance Xitanium outdoor LED drivers with SimpleSet technology are designed to give OEMs ultimate flexibility. With the drivers' wide operating windows and simple programming, luminaire manufacturers can design luminaires of different sizes and lumen levels for outdoor applications.

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 | Dim | Dimming Range (with specified dimmers) | Min. Output Current (A) | Driver Type |
|---------------------|------------------|--------------------|--------------------|-------------------------------------|---------------------|-------------------|----------------------|--------------------|-------------------------|-----------------------------------|---------------------------|-----------------------------------|--|-------------------------|------------------|
| 120 | 100 | 48-143 | 0.1 - 1.1 | 89.5 | 85°C | 0.94 | 114 | <10% | >0.95 | 6 | UL damp & dry and Type HL | 0-10V Analog Class 1 and 2 Wiring | 10% ~ 100% | 0.03 | Constant Current |
| 277 | | | | 91.2 | | 0.42 | | | | | | | | | |

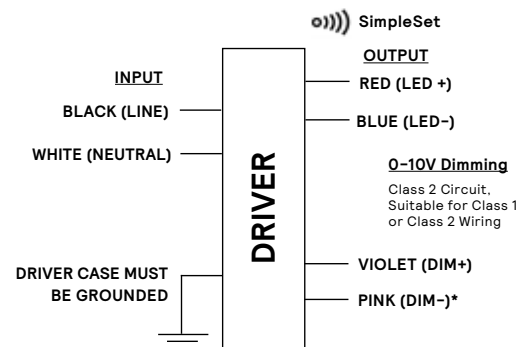
Enclosure

| | In. (mm) | Tolerance (mm) |
|----------------------------------|--------------|----------------|
| Overall Length (A1) | 6.59 (167.5) | ± 0.5mm |
| Mounting Length (A2) | 6.03 (153.2) | ± 0.5mm |
| Case Length (A3) | 5.43 (138.0) | ± 0.5mm |
| Case Width (B1) | 2.31 (58.8) | ± 0.5mm |
| Mounting Width (B2) | 1.69 (42.9) | ± 0.5mm |
| Case Height (C1) | 1.48 (37.6) | ± 1.0mm |
| Mounting Hole Diameter (D1) | 0.31 (7.9) | ± 0.5mm |
| Mounting Hole Diameter (D2) | 0.24 (6.2) | ± 0.5mm |
| Center of SimpleSet Antenna (G1) | 2.30 (58.5) | ± 3.0mm |



Wiring Diagram

| | Wire Length (mm) |
|-----------------------------|------------------|
| Black (Line) | 270 (± 30) |
| White (Neutral) | 270 (± 30) |
| Red (Positive, LED output) | 270 (± 30) |
| Blue (Negative, LED output) | 270 (± 30) |
| Violet (Positive, 0-10V) | 270 (± 30) |
| Pink* (Negative, 0-10V) | 270 (± 30) |



*DIM- will change from GREY to PINK from 2021 onwards.

Warning

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

Xitanium XI100C110V143BSY1

100W 0.1–1.1A 0–10V with SimpleSet

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

- Enables long life luminaire designs
- Fast and simple way of programming
- Enables fixture designs with wide variety of loads and adjustable current options
- No external surge protection required to pass C82.77-5 CAT C low

Application

- Area
- Roadway
- Parking garages
- Floodlights
- Mid-bay and low-bay fixtures

Electrical Specifications

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

Product Data

| Order Information | |
|---|--|
| Full Product Code | XI100C110V143BSY1M (Mid-Pack, 12pcs/Box) |
| Line Frequency | 50/60Hz |
| Min. Mains Voltage Operational | 108 Vac |
| Max. Mains Voltage Operational | 305 Vac |
| Output Information | |
| Maximum Open Circuit Voltage | 190Vdc |
| Output Current Ripple (ripple = peak to average / average) | 15% max @ max lout |
| 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 (±3%) source current from driver. See dim curve for detail |
| AOC (Adjustable Output Current) | 0.1A–1.1A via SimpleSet (Factory Default at 1.05A) |
| Additional SimpleSet Configurable Features | Adjustable Min Dim level, Adjustable Lumen Output, Adjustable Lumen Output Min, OEM Write Protection |
| Environment & Approbation | |
| Operating Ambient Temp. Range | –40°C to +55°C |
| Max Case Temperature (Tcase) | 85°C |
| Agency Approbations | UL Listed, NOM, cUL, Class P (UL, cUL) |
| Electromagnetic Compliance | FCC Title 47 Part 15 Class A |
| Audible Noise | <24dB Class A |
| Weight | 1.44 Lbs / 0.65 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 MTBF modeling.

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100W 0.1–1.1A 0–10V with SimpleSet

Electrical Specifications

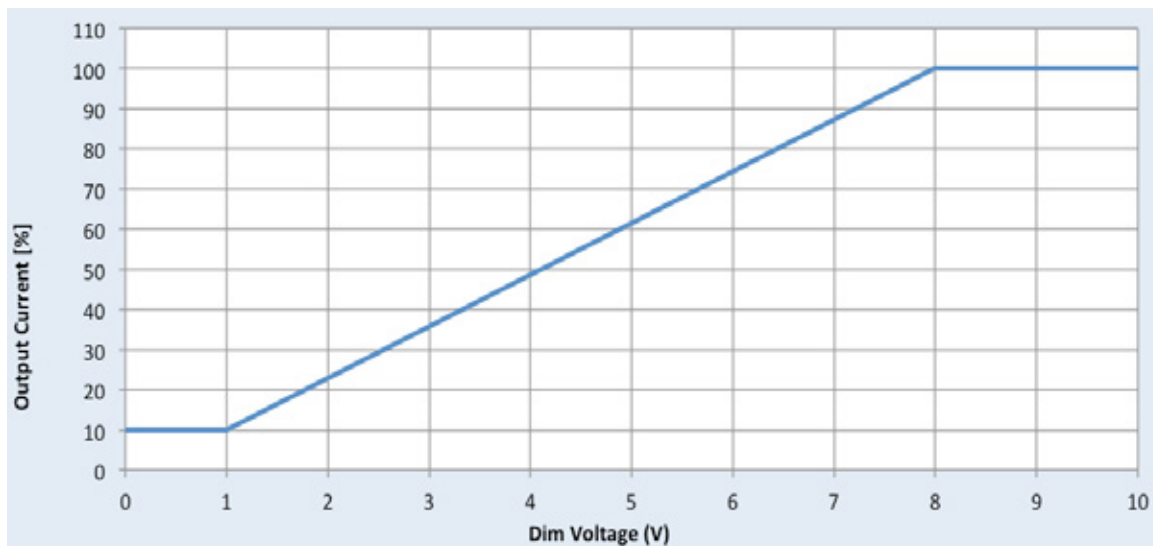
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0–10V Dimming Curve

- Dimming source current from the driver: 150µA (@ 0<Vdim<8V)
- Minimum Dim Level: Factory default 10% of Iout (minimum 100mA), can be programmed to a higher level via SimpleSet
- Maximum output voltage on the dimming wires: 12V
- Leakage current of dimming leads: 0.010mA, recommended max number of control circuits in parallel refer to Design-in Guide

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 |



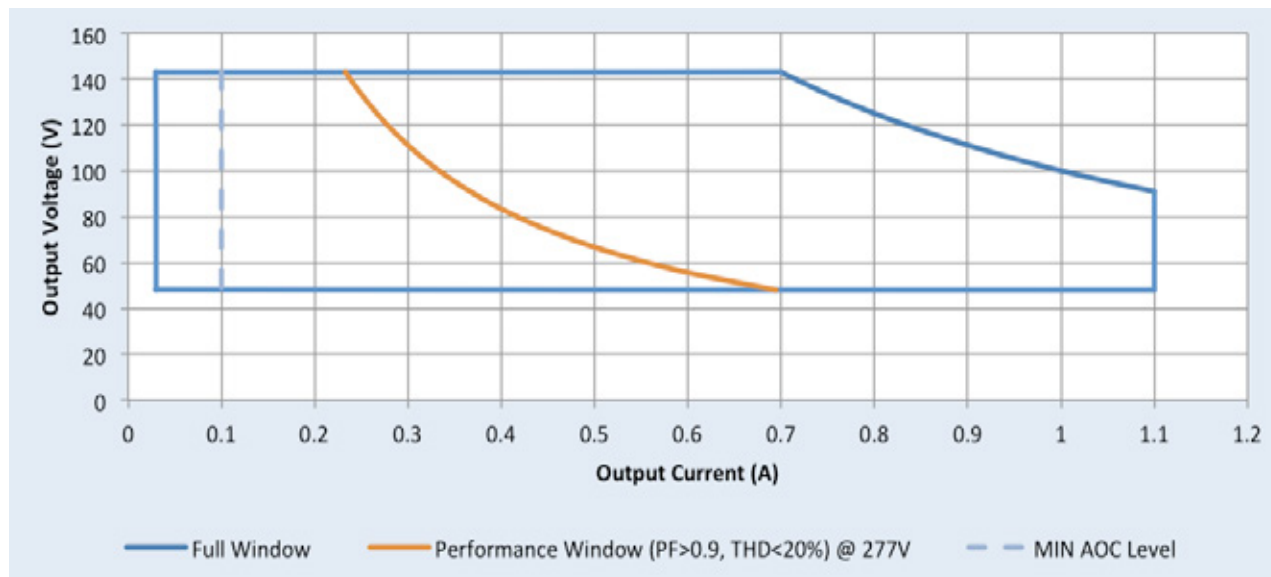
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100W 0.1-1.1A 0-10V with SimpleSet

Electrical Specifications

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Driver Output Window



Notes

1. Factory default output current is 1.05A.
2. To get a 100% to 10% dimming range, the output current setting through AOC should be > 0.3A.

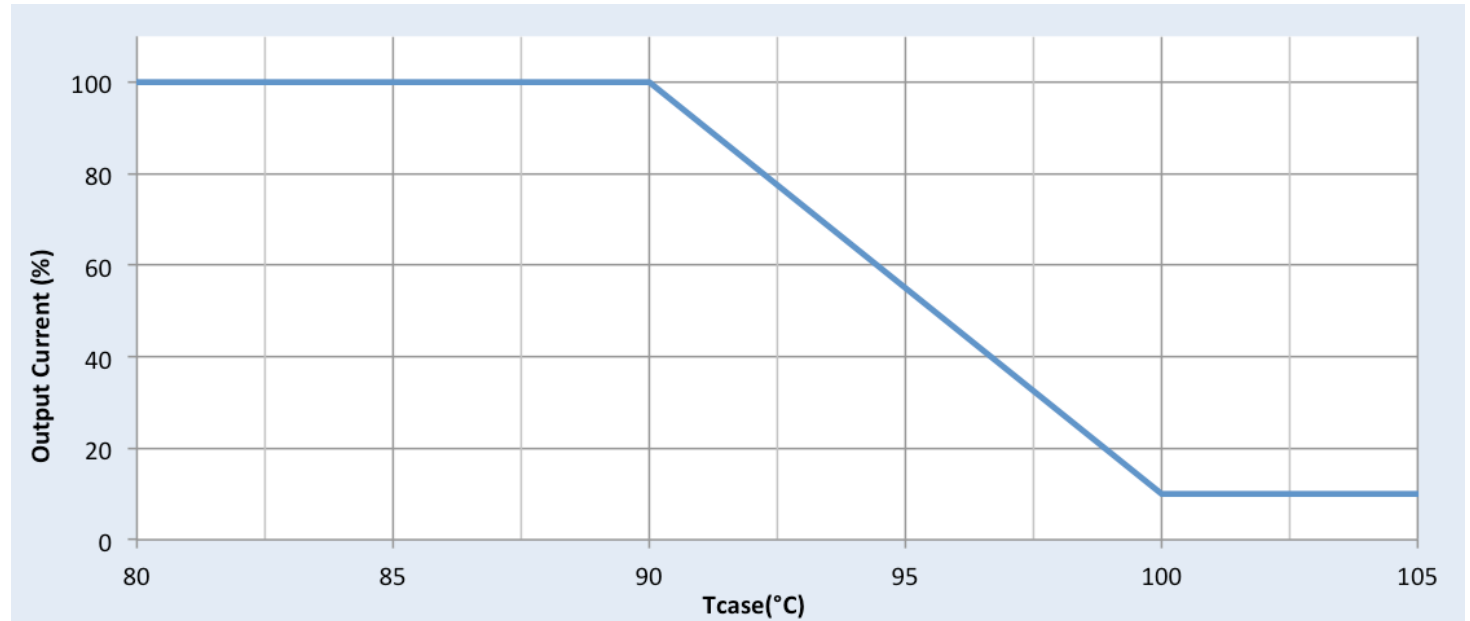
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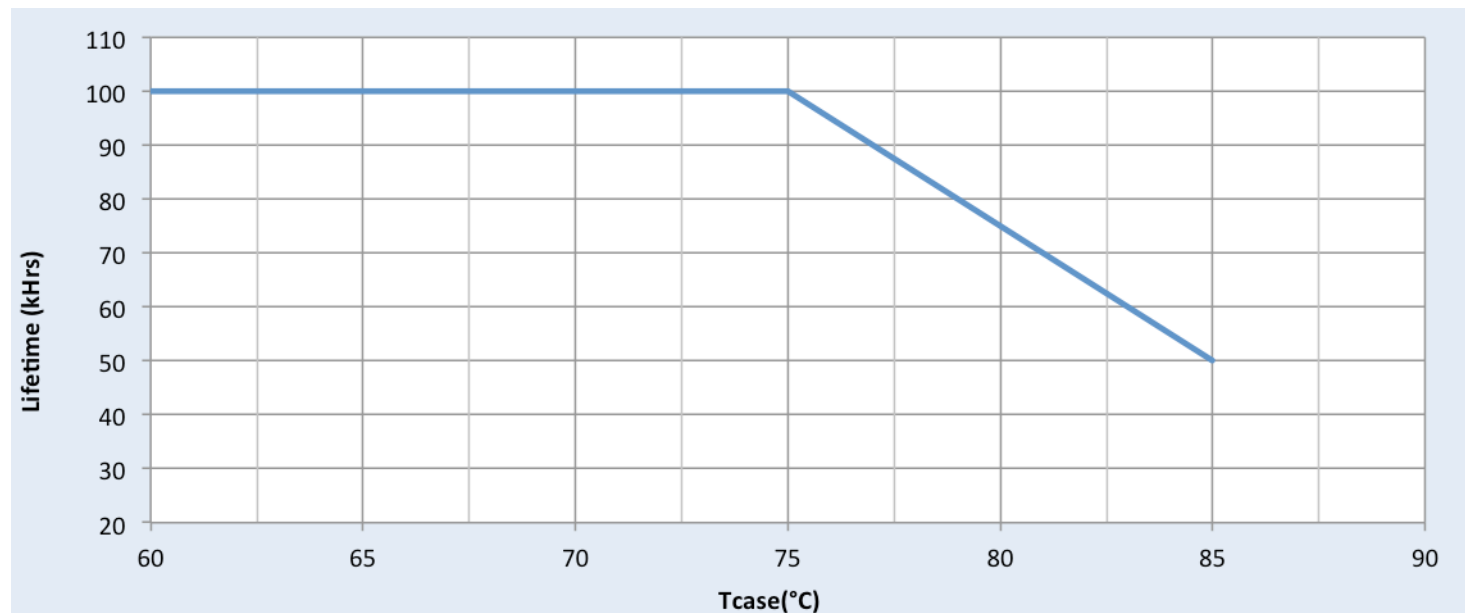
Output Current Vs. Driver Case Temperature



Note

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

Driver Lifetime vs. Driver Case Temperature



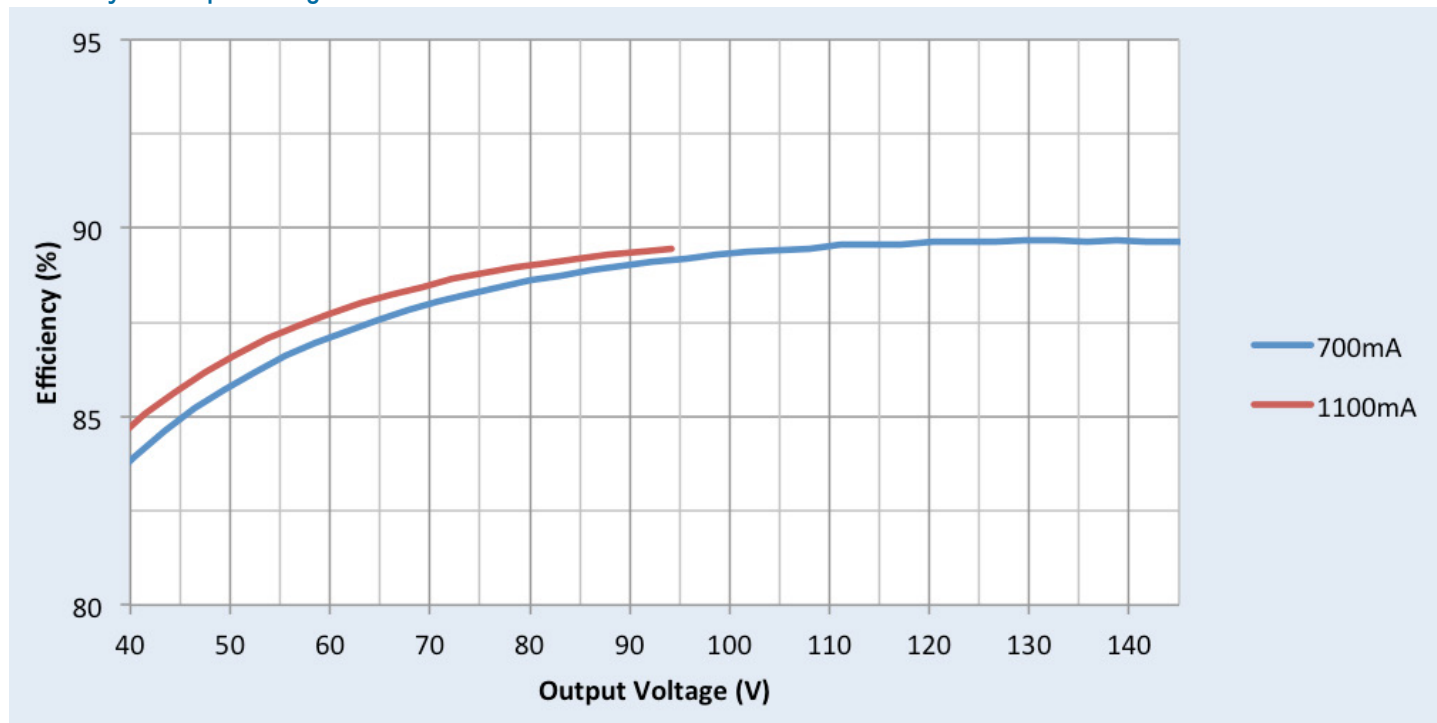
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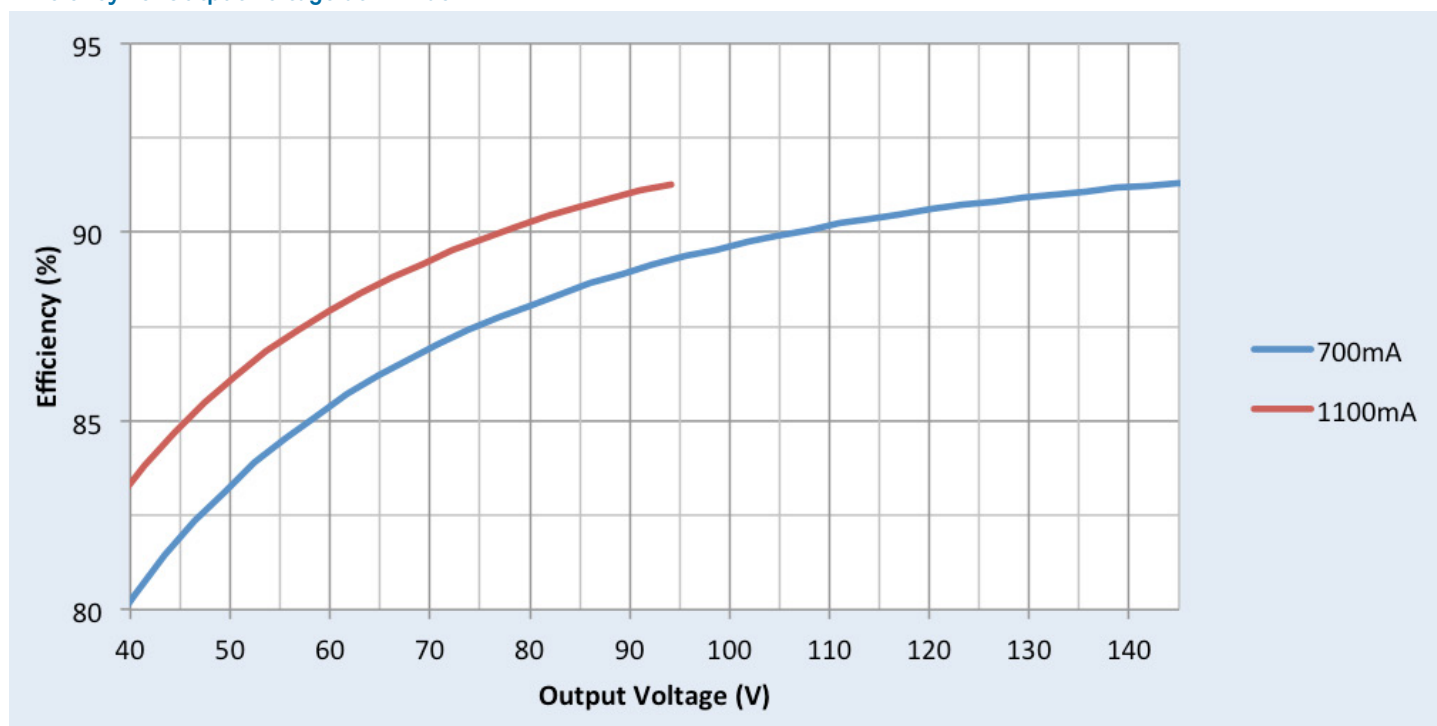
Performance Characteristics

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



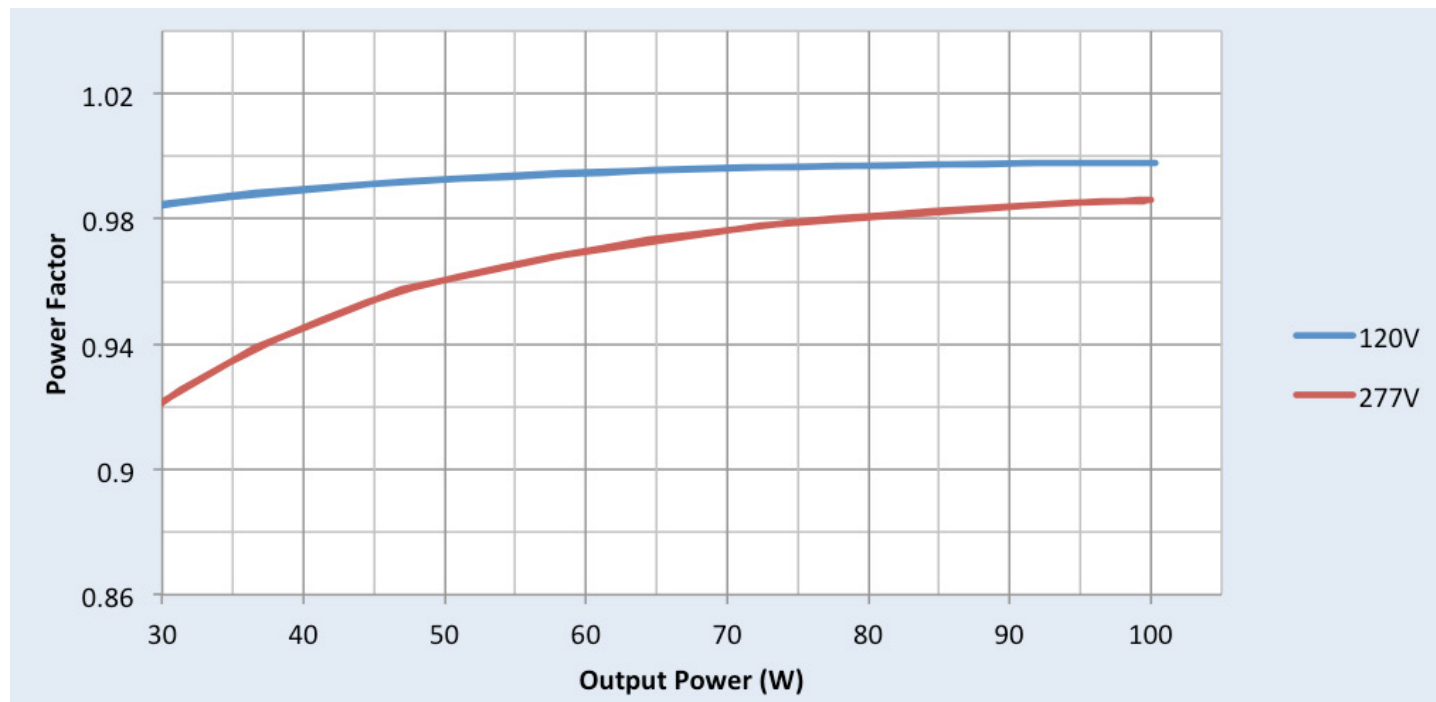
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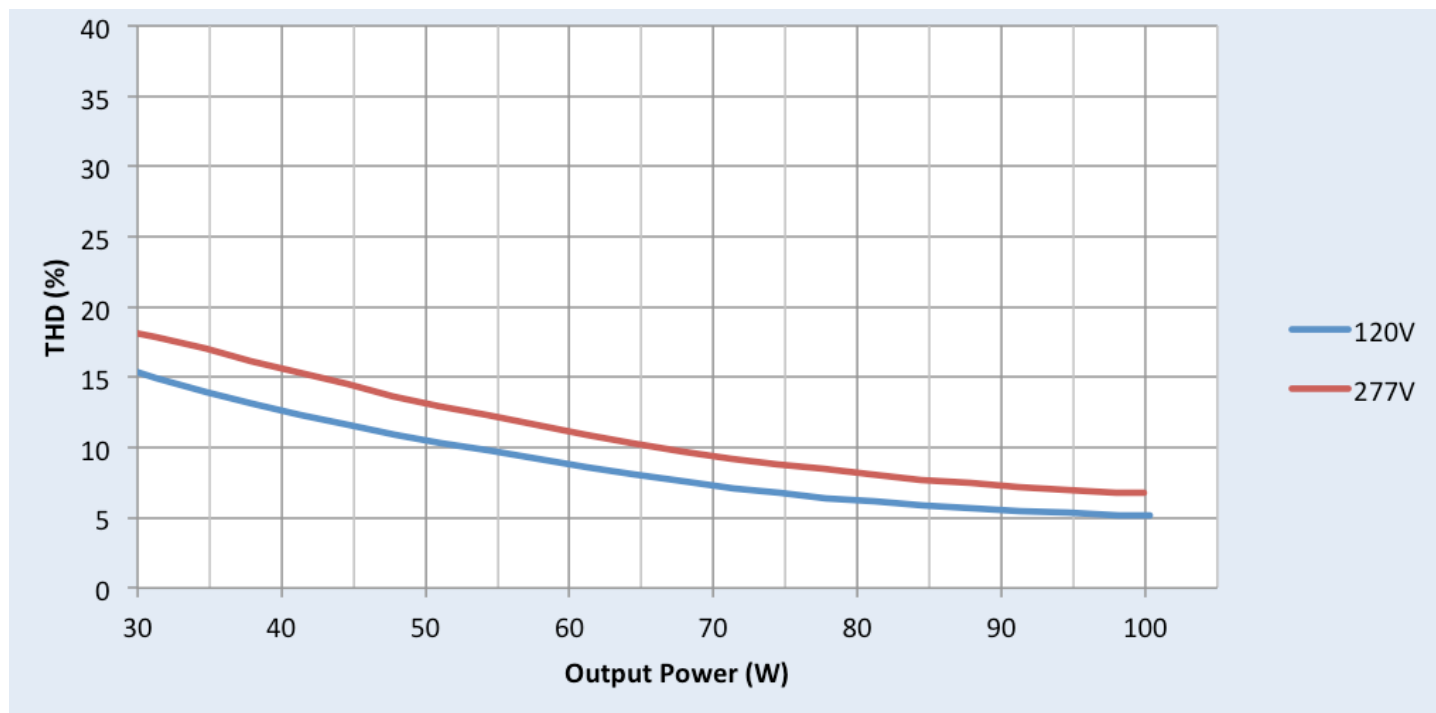
Performance Characteristics

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Power Factor Vs. Output Power



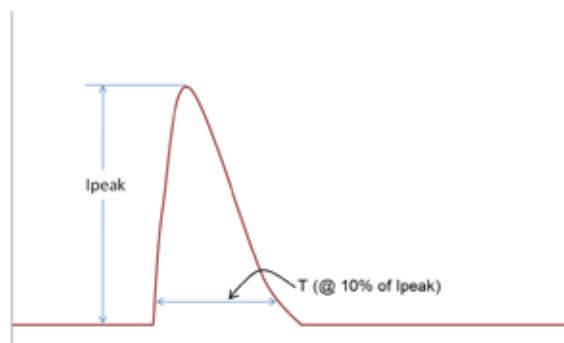
Total Harmonic Distortion (THD) Vs. Output Power



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Inrush Current Info



| Vin | Ipeak | T (@ 10% of Ipeak) |
|----------|-------|--------------------|
| 120 Vrms | 57A | 166 μ s |
| 277 Vrms | 135A | 160 μ 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 μ s Combination Wave (w/t 2 Ω) | 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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