ADVANCE
by signify

LED Driver

Xitanium

XH150C053V280CNF1

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.

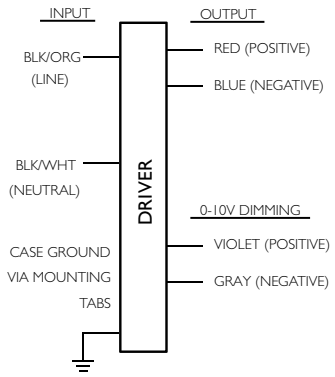
Specifications

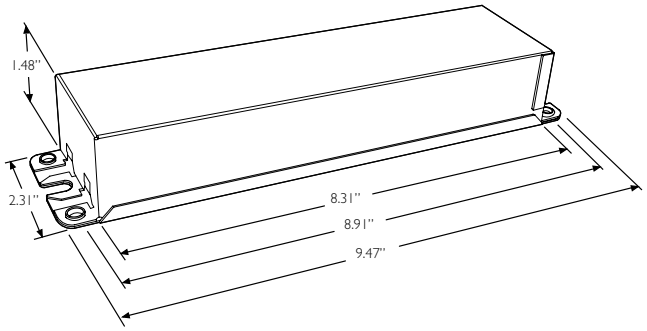
Input Voltage (Vrms)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max Load and 70°C Case	Max. Case Temp. (°C)	Input Current (Arms)	Max. Input Power (W)	THD @ Max. Load	Power Factor @ Max. Load	Surge Protection Common/ Diff (KV)	Envir. Protection Rating
347	150	90 - 280	0.53	92	80	0.50	164	<10%	>0.95	6	UL damp & dry, Type HL
480				93		0.35					

Enclosure

	In. (mm)
Case Length	8.31 (211.1)
Case Width	2.31 (58.6)
Case Height	1.48 (37.6)
Mounting Length	8.91 (226.3)
Overall Length	9.47 (240.5)

Wiring Diagram





Dimming	Dimming Range	Minimum Output Current (A)
0-10V Analog Class 1 and 2 Wiring	10% ~ 100%	0.053

Dry & Damp location

RoHS COMPLIANT

Xitanium XH150C053V280CNF1

150W 347-480V 0.53A 0-10V

Electrical Specifications

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

Features

- 50,000+ hour lifetime[1]
- Excellent thermal performance
- 6kV Combi-wave surge rating to comply with ANSI C82.77-5 CAT C low

Benefits

- Enables long life luminaire designs
- Allows luminaire designs for ambient environmentss
- No external surge protection required to pass C82.77-5 CAT C low

Application

- Area
- Roadway
- Parking garages
- Floodlights

Product Data

Order Information	
Full Product Code	XH150C053V280CNF1M (Mid-Pack, 10pcs/Box)
Line Frequency	50/60Hz
Min. Mains Voltage Operational	312V
Max. Mains Voltage Operational	528V
Output Information	
Maximum Open Circuit Voltage	380Vdc
Output Current Ripple (ripple = peak to average / average)	15% max @ max Iout and max Vout Low frequency (≤120 Hz) content <5%
Output Current Tolerance (at maximum output current)	<5%
Protections	Short Circuit and Open Circuit Protection for LED + and LED – and Temperature Foldback
Operating Ambient Temp. Range	-40°C to +55°C
Max Case Temperature (Tcase)	80°C
Features	
0-10V Dimming Specifications	150µA ± 3% source current from driver. See dim curve for detail.
Environment & Approbation	
Agency Approbations	UL 8750, CSA 250.13
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Audible Noise	<24dB Class A
Weight	1.98Lbs/ 0.90Kgs

1. Advance Xitanium LED Drivers are designed and manufactured to engineering standards correlating to an 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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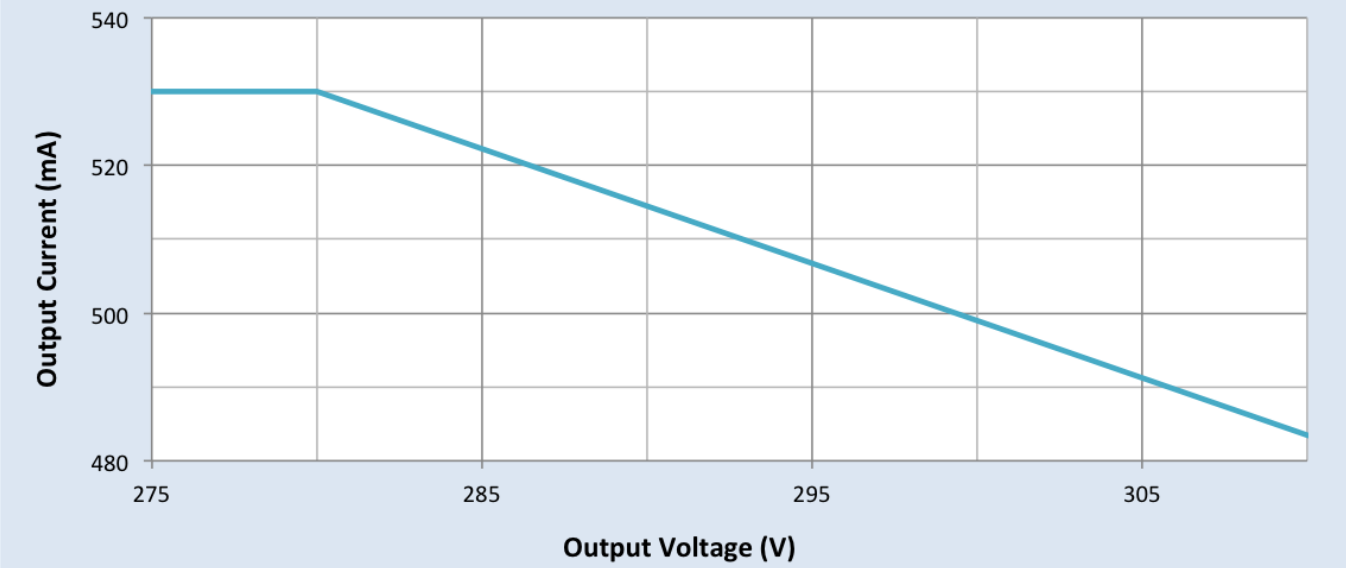
Driver Current Cutback

The Driver Current Cutback feature provides for an increased output voltage with a reduced output current during abnormal LED operation, such as cold weather starting.



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0-10V Dimming Curve

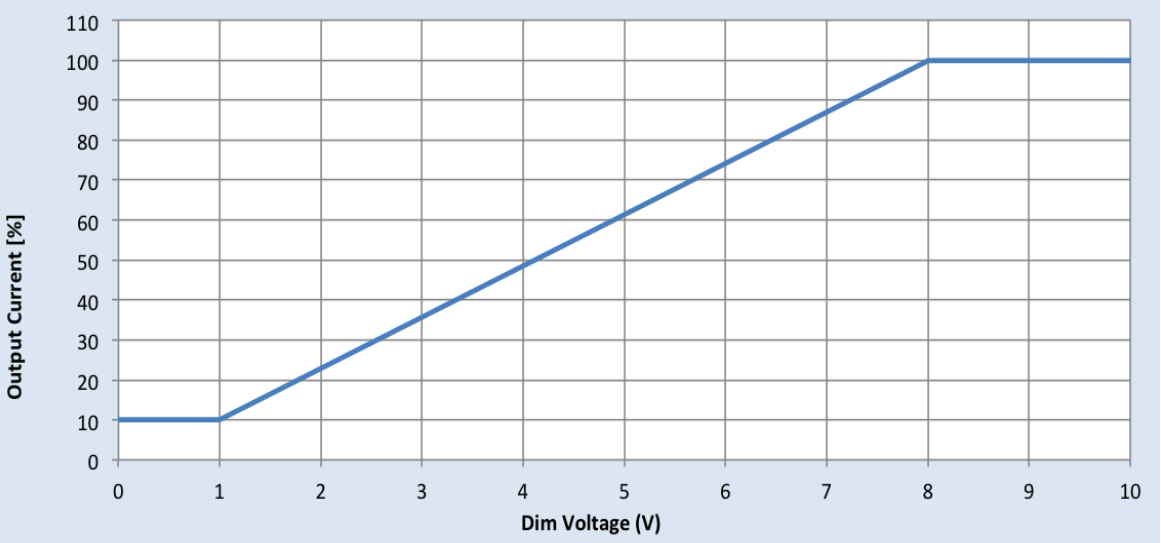
Dimming source current from the driver: 150µA (@ 0<Vdim<8V)

Minimum dim level: 10% of Iout

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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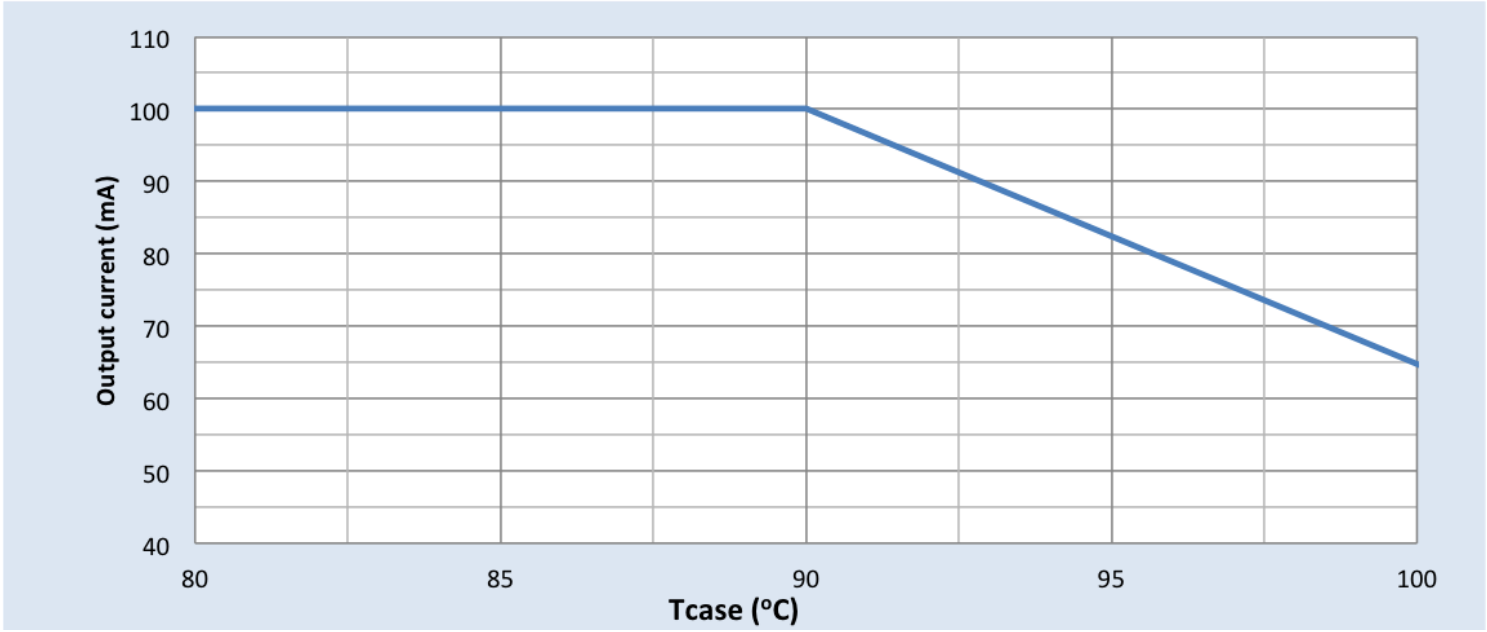
150W 347-480V 0.53A 0-10V

Performance Characteristics

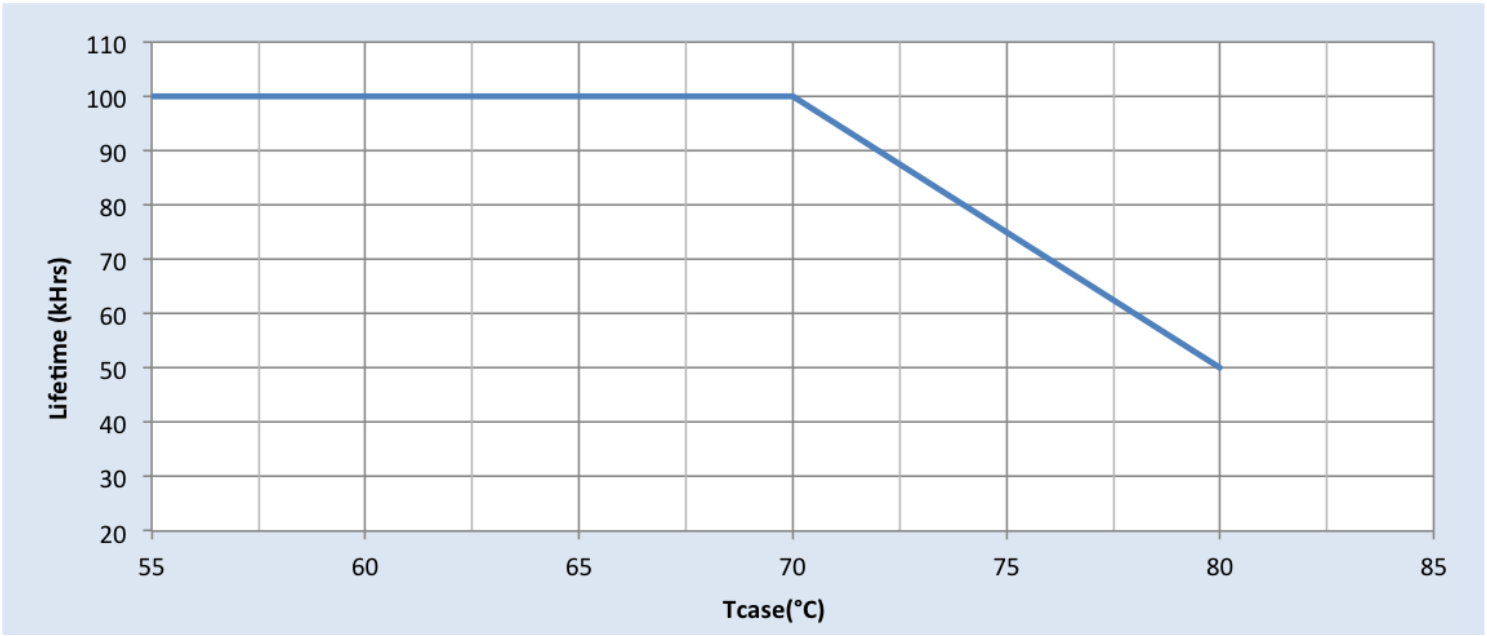
Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.

Output Current Vs. Driver Case Temperature



Note: There is ±5°C tolerance on the driver case temperature.

Driver Lifetime vs. Driver Case Temperature



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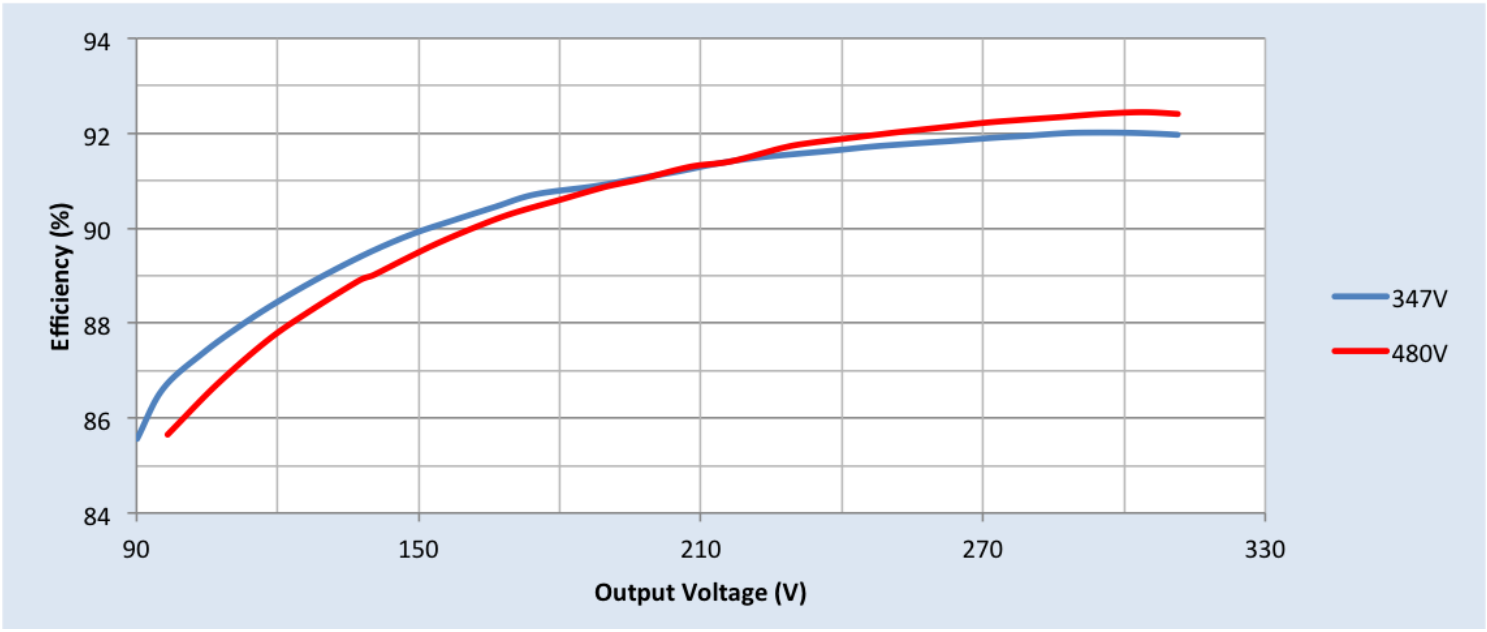
Efficiency Vs. Output Voltage



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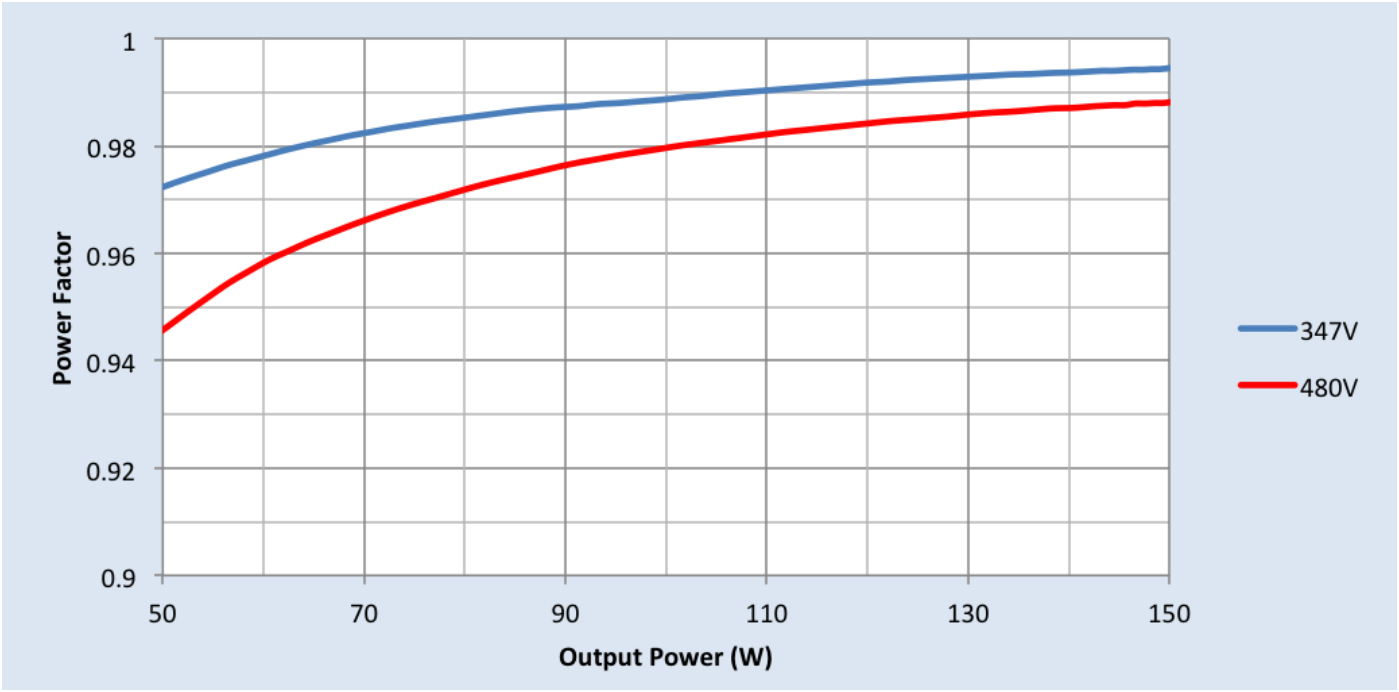
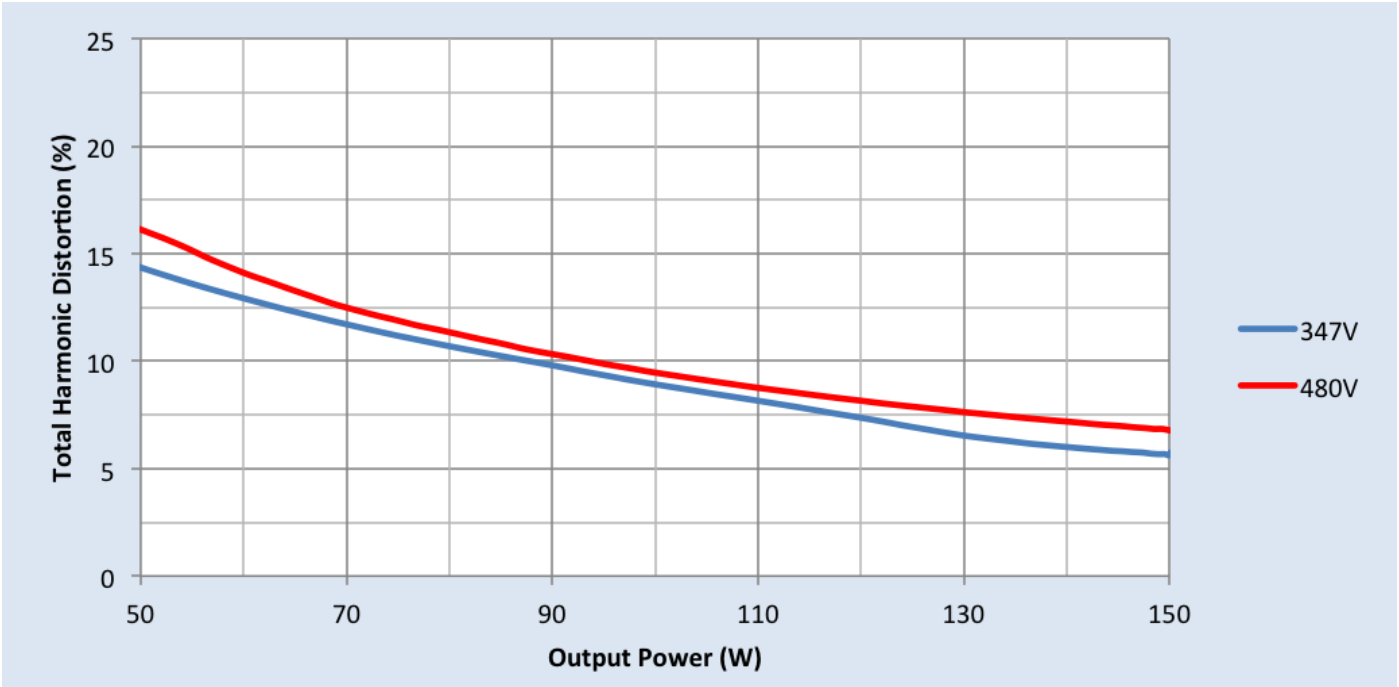
Power Factor Vs. Output Power



Total Harmonic Distortion (THD) Vs. Output Power



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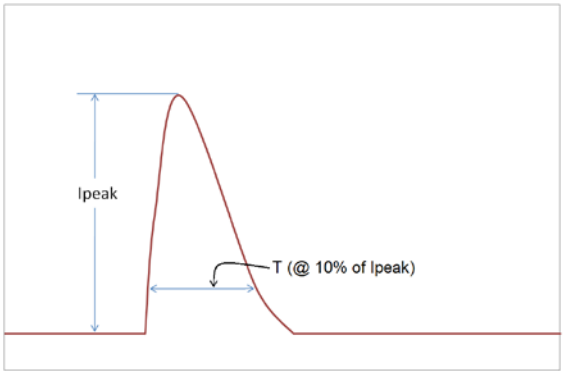
Inrush Current Info:



Vin	Ipeak	T (@ 10% of Ipeak)
347 Vrms	57A	196µs
480 Vrms	78A	196µs

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)
1.2/50µs 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 (Class 1 & 2)	2.5kV	2.5kV	NA	2.5kV
Enclosure	2xU+1kV	2xU+1kV	2.5kV	NA

UL Conditions of Acceptability

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

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