ADVANCE
by signify

LED Driver

Xitanium

XI095C240V050BPT1

The **Advance Xitanium** range of edge industrial LED Drivers are designed to provide OEMs with efficient solutions for Class 2 linear high bay luminaries. These models are compatible with standard 0-10V dimming systems to deliver reliably smooth dimming performance down to a minimum of 10%. Adjustable output current via the **SimpleSet Wireless** programming enables OEM's to use 1 driver for multiple lumen packages.

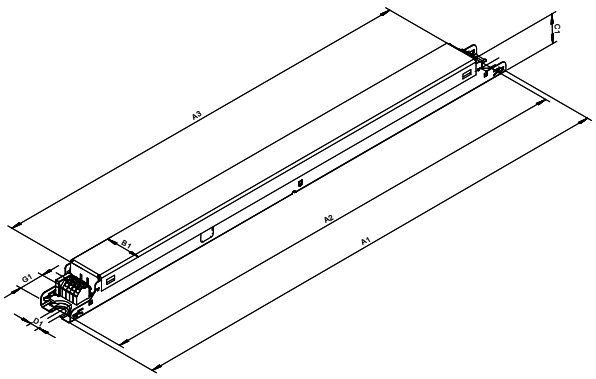
Specifications

Input Voltage (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max. Load and 80°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	Dimming	Dimming Range (with specified dimmers)	Min. Output Current (A)
120	95	24 - 50	0.1 - 2.4	88.5	Life - 85°C UL - 90°C	0.9	108	<10	>0.95	6	UL Damp & Dry	0-10V Analog Class 1 and 2 Wiring	10% ~ 100%	0.05
277				89.5		0.39		<15						

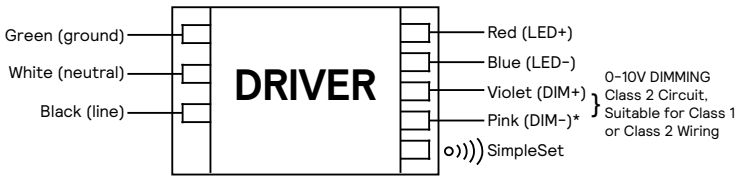
Enclosure

	In. (mm)	Tolerance (mm)
Overall Length (A1)	16.69(424)	±0.5
Mounting Hole Distance (A2)	16.34(415)	±0.5
Case Length (A3)	14.49(368)	±0.5
Case Width (B1)	1.20(30.5)	±0.5
Case Height (C1)	1.02(25.8)	±1.0
Mounting Hole Diameter (D1)	0.31(7.9)	±0.3
Center of SimpleSet Antenna (G1)	0.76(19.4)	±3.0

Mechanical Diagram



Wiring Diagram



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

WARNING

- Install in accordance with national and local electrical codes.
- Use 18 AWG Solid Copper Wire Rated >= 90 °C.
- Strip Wire 3/8".
- For Class 2 wiring, use 20 AWG-16 AWG.

GROUNDING

- Driver case must be grounded.

Dimming	Dimming Range	Minimum Output Current (A)	Other Comments
0-10V Suitable for Class 1 or Class 2 Wiring	10% - 100%	0.05	Dimming source current: 150uA (min 100uA, Max 250µA)

RoHS COMPLIANT
c UL us LISTED
c ETL us Intertek
NOM

Xitanium XI095C240V050BPT1

XIT Edge 95WBP 0.1-2.4A 24-50V Tcan 6kV

Features

- 50,000+ hour lifetime[1]
- Programmable output current through SimpleSet
- 6kV/3kA Surge rating – ANSI C82.77-5

Benefits

- Designed for Class 2 luminaires
- Fast and simple way of programming
- No external surge protection required to pass C82.77-5 CAT C low

Application

- High-bay and mid-bay fixtures

Electrical Specifications

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

Product Data

Order Information	
Full Product Code	XI095C240V050BPT1 (Mid-Pack, 12 pcs/Box), 12NC: 929002724513
Line Frequency	50/60Hz
Min. Mains Voltage Operational	108Vac
Max. Mains Voltage Operational	305Vac
Output Information	
Maximum Open Circuit Voltage	<60Vdc
Output Current Ripple (ripple = peak to average / average)	15% max @ max Iout (4% max @ Visible for stroboscopic Frequency range 60Hz-3Khz)
Output Current Tolerance	<5%
Protections	Short Circuit, Open Circuit Protection for LED + and LED – and mis-wiring protection
Features	
0-10V Dimming Interface current	150uA (min 100uA, Max 250µA for dimming voltage>1V)
0-10V Active Range	1V to 8V. See dim curve for details.
AOC (Adjustable Output Current)	0.1A-2.4A via SimpleSet programming(refer to graph and notes below, Factory Default at 2.4A)
Additional SimpleSet Configurable Features	Adjustable Output Current (AOC) OEM Write Protection (OWP)
Environment & Approbation	
Operating Ambient Temp. Range	-40°C to +55°C
Max Case Temperature (Tcase)	90°C
Agency Approbations	UL8750, CSA-C22.2 No. 250.13, NOM, Class P(ETL, cUL , UL)
Leakage current of dimming leads	0.005mA, recommended max number of control circuits in parallel refer to Design-In Guide
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Audible Noise	<24dB Class A
Weight	0.79 Lbs / 0.5 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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XIT Edge 95WBP 0.1-2.4A 24-50V Tcan 6kV

Electrical Specifications

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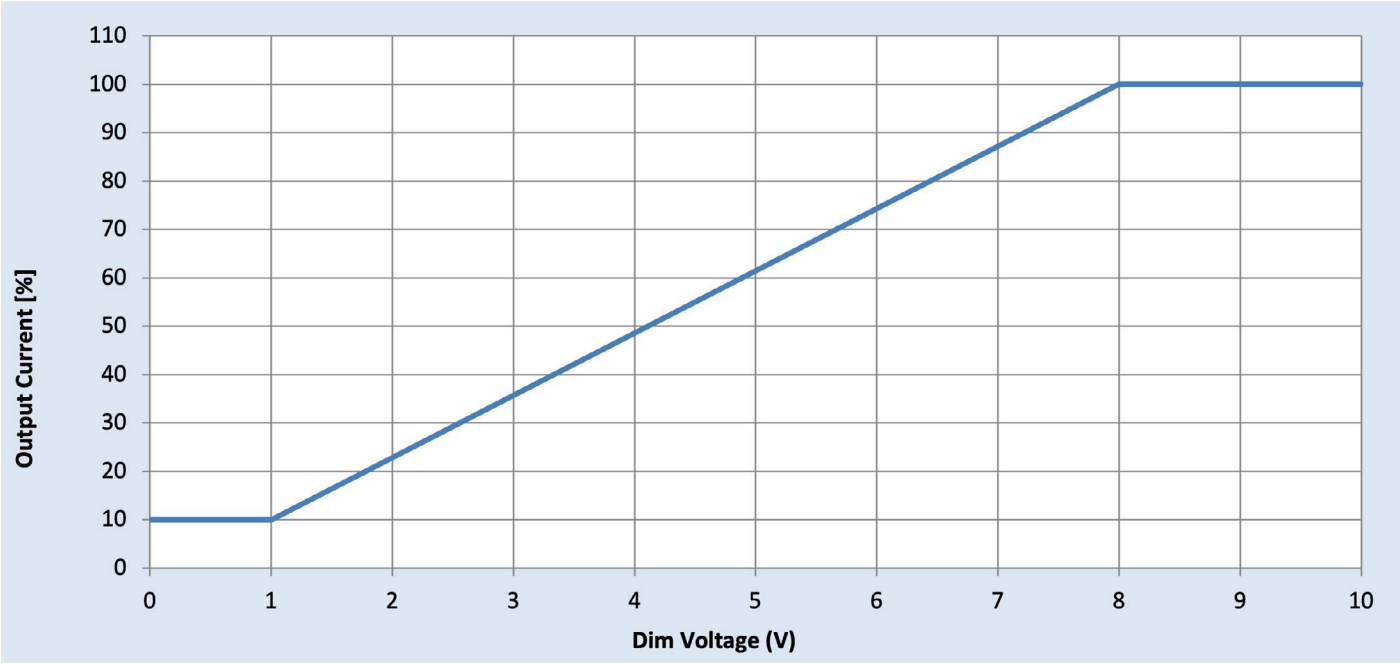
0-10V Dimming

Dimming source current from the driver: 150uA (min 100uA, Max 250µA @ 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
Philips	Sunrise - SR1200ZTUNV

0-10V Dimming Curve



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XIT Edge 95WBP 0.1-2.4A 24-50V Tcan 6kV

Performance Characteristics

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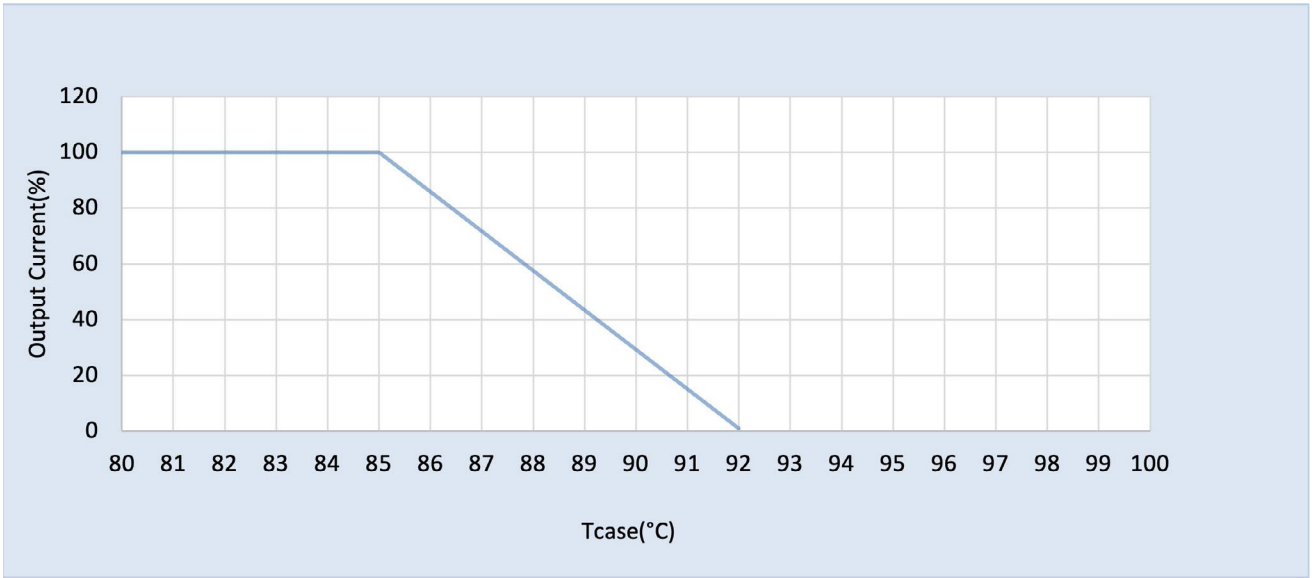
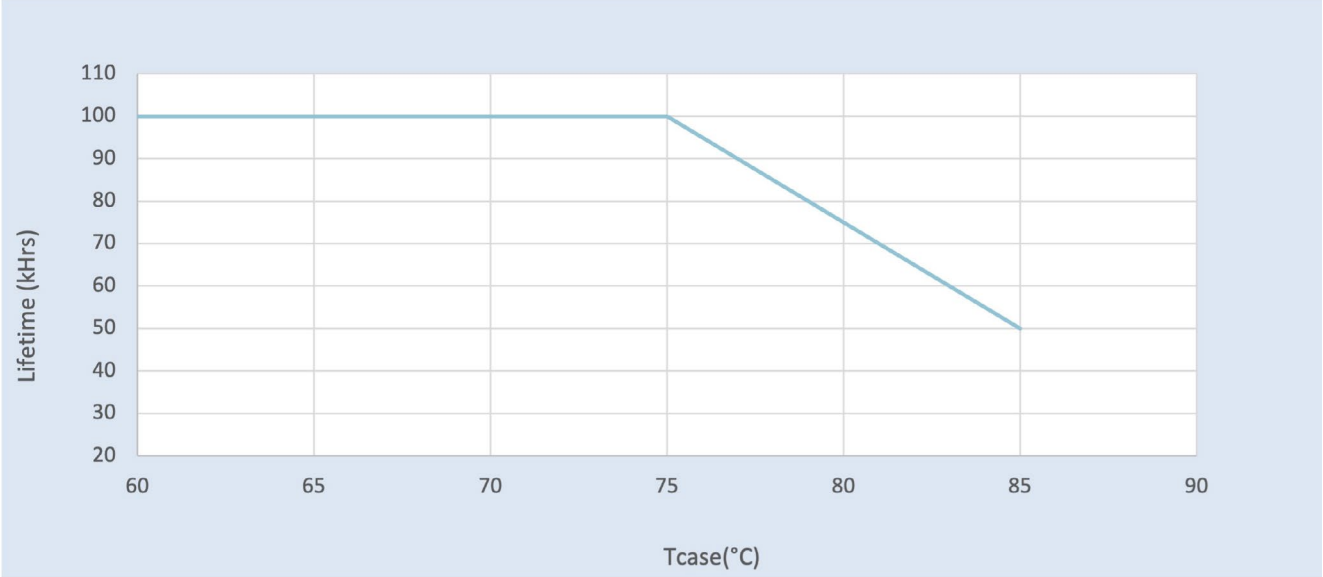
Output Current Vs. Driver Case Temperature



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

Driver Lifetime vs. Driver Case Temperature



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Electrical Specifications

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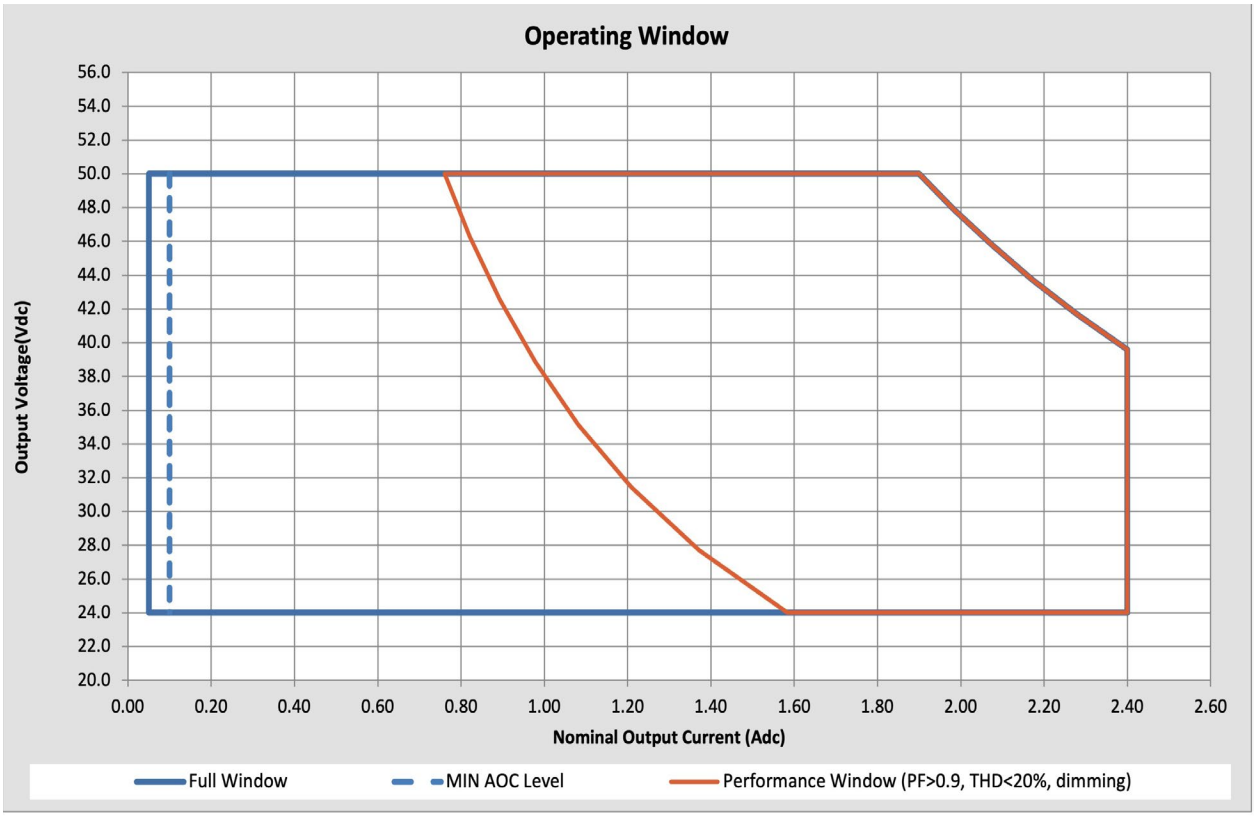
Operating Window



Note: Factory default output current is 2.4A

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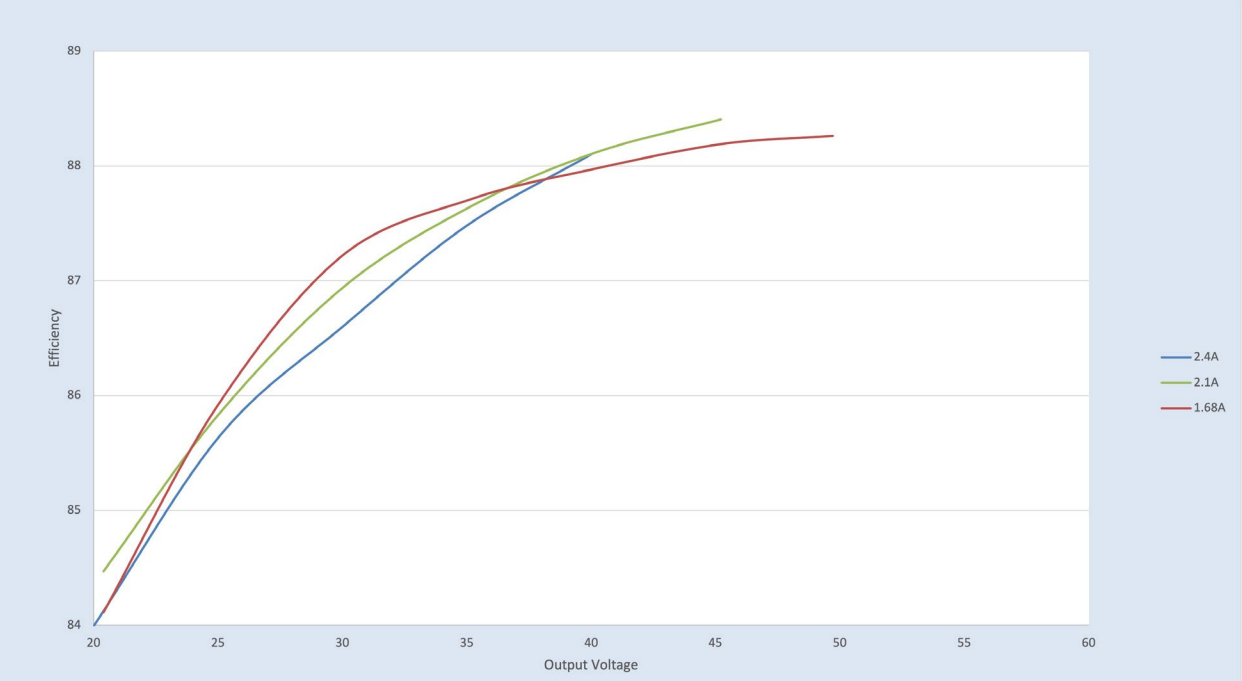
XIT Edge 95WBP 0.1-2.4A 24-50V Tcan 6kV

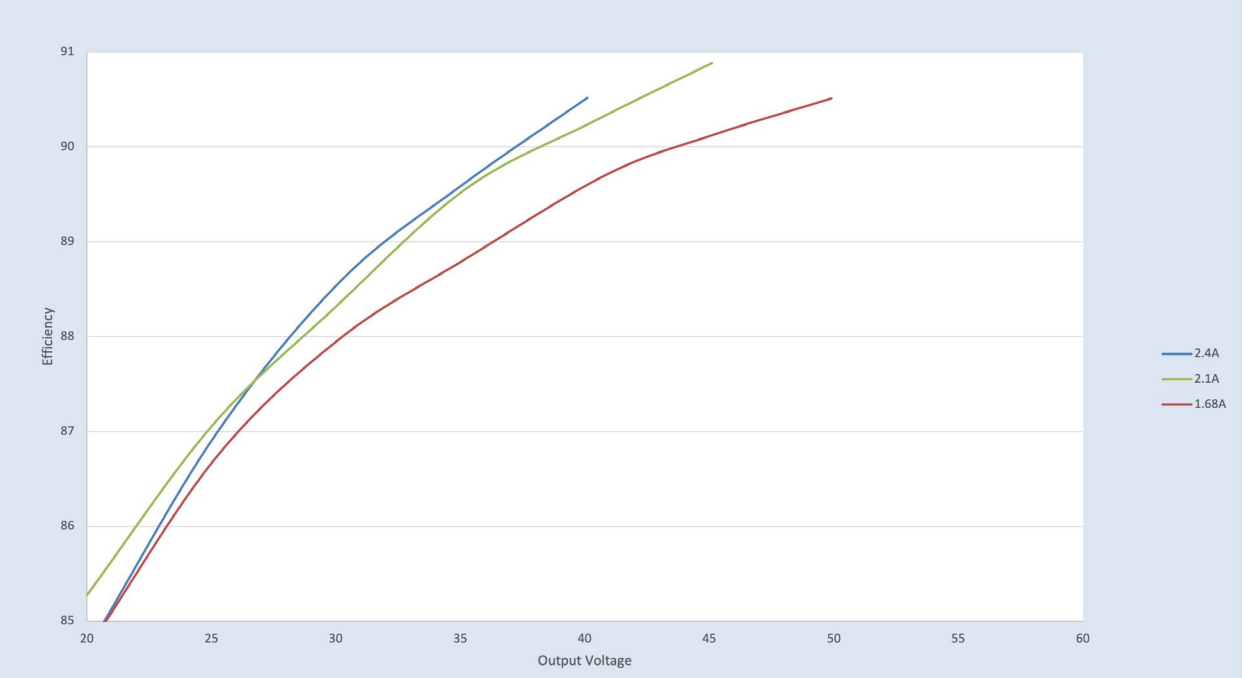
Performance Characteristics

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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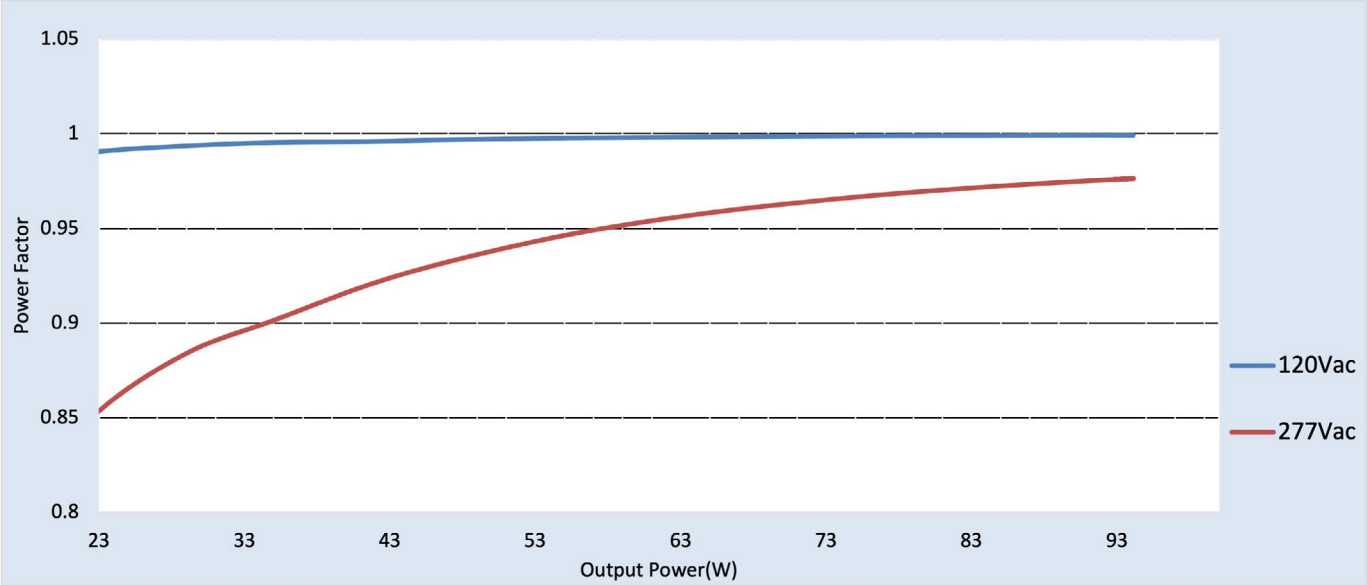
XIT Edge 95WBP 0.1-2.4A 24-50V Tcan 6kV

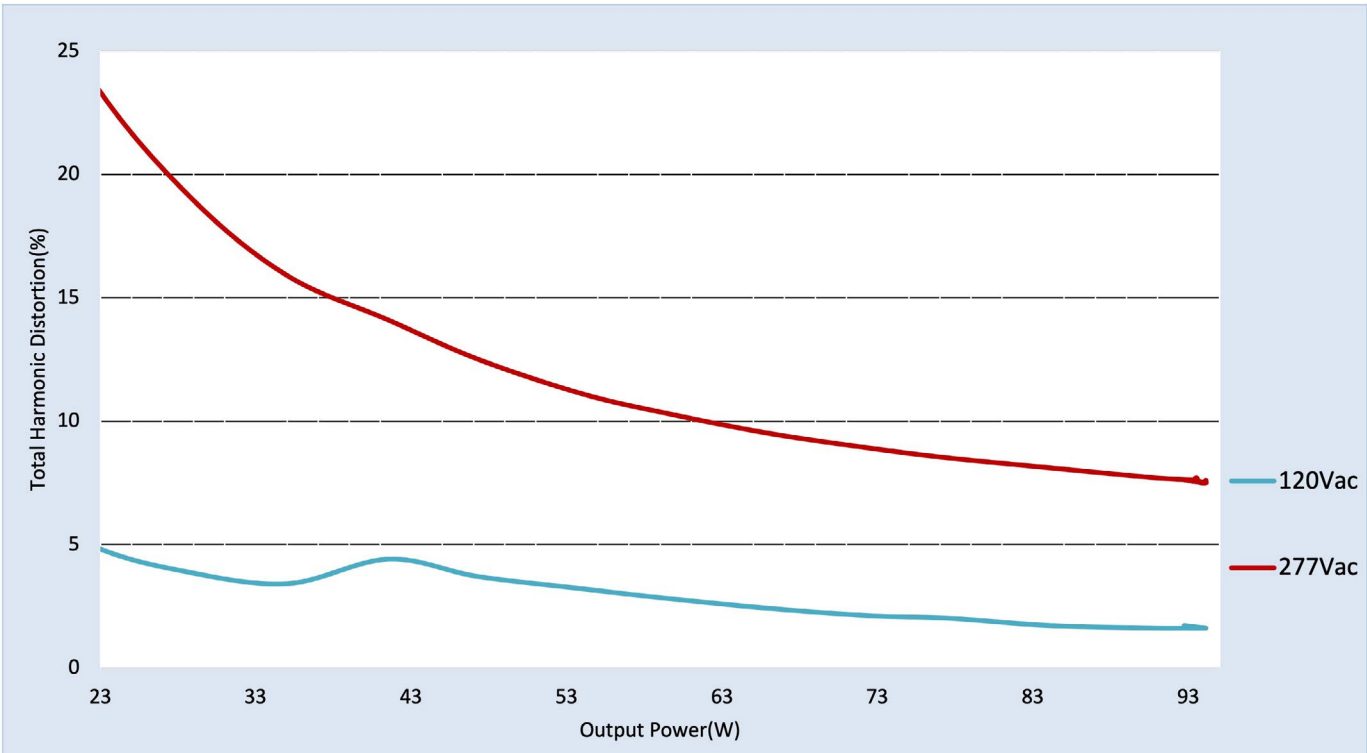
Performance Characteristics

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.

Power Factor Vs. Output Power



Total Harmonic Distortion (THD) Vs. Output Power



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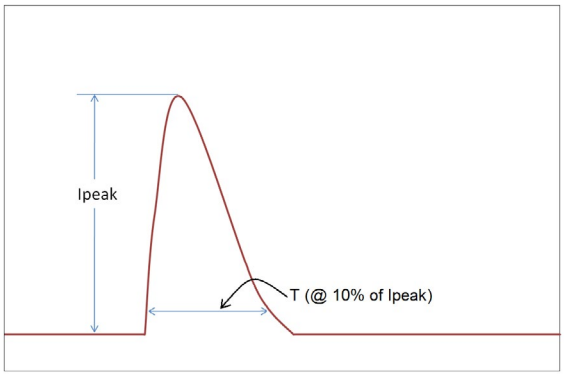
Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)
120 Vrms	38.4A	179.5us
277 Vrms	99.6A	144.5us

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)
Combi Wave (w/t 2Ω)	6kV	6kV

Isolation

Isolation	Input	Output	0-10V	Enclosure
Input	N/A	2xU+1kV	2.5kV	2xU+1kV
Output	2xU+1kV	N/A	2.5kV	2xU+1kV
0-10V	2.5kV	2.5kV	N/A	2.5kV
Enclosure	2xU+1kV	2xU+1kV	2.5kV	N/A

U = Max. input voltage

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