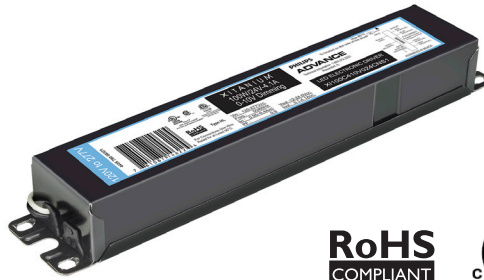


**PHILIPS  
ADVANCE**

LED Driver

Xitanium

72W 120-277V 3.0A 0-10V  
XI072C300V024CNS1



**RoHS  
COMPLIANT**



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

**LISTED E321253**  
Class P  
LED class 2 output  
For Dry and Damp Location

The Philips Advance Xitanium portfolio provides high-performance and reliable driver solutions for lighting applications. The Xitanium LED drivers with both constant voltage (CV) and constant current (CC) mode are compatible with respective loads and allow the user to utilize the same driver for CV and CC applications. The drivers provide general illumination for outdoor applications, including LED signs and canopy lights. They can also be used in indoor CV applications such as strip and bar lights or under-cabinet lighting, ambient lighting and low-bay and high-bay industrial lighting.

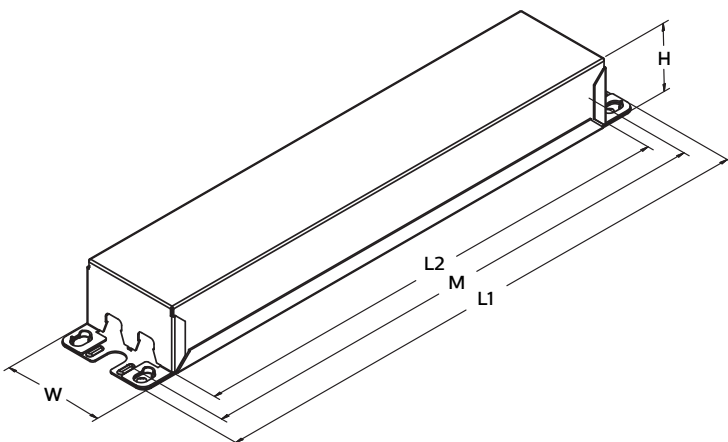
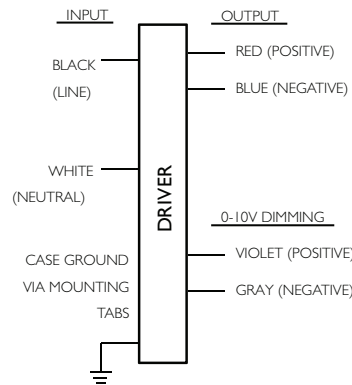
**Specifications**

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	72	12-24 CC Mode	3.0	87	85°C	0.7	85	<10%	>0.95	4	UL damp & dry and Type HL
277				88		0.3					

**Enclosure**

	In. (mm)
Case Length (L2)	8.34 (211.7)
Case Width (W)	1.70 (43.1)
Case Height (H)	1.12 (28.5)
Mounting Length (M)	8.89 (225.8)
Overall Length (L1)	9.45 (240)

**Wiring Diagram**



Dimming	Dimming Range (with specified dimmers)	Minimum Output Current (A)
0-10V Analog Class 1 and 2 Wiring	10% ~ 100%	0.3

# Xitanium 72W 3.0A 0-10V dimming

## Features

- 50,000+ hour lifetime<sup>1</sup>
- Excellent thermal performance
- Can be used in constant current (CC) or constant voltage (CV) mode<sup>2</sup>

## Benefits

- Enables long life luminaire designs
- Allows luminaire designs for a wide range of ambient environments

## Application

- Area
- Roadway
- Ambient, bar and strip lights
- Exterior and canopy lighting

## Electrical Specifications

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

## Product Data

Order Information	
Full Product Code	XI072C300V024CNS1M (Mid-Pack, 20pcs/Box) 12NC: 929001708013
Line Frequency	50/60Hz
Min. Mains Voltage Operational	108 Vac
Max. Mains Voltage Operational	305 Vac
Output Information	
Maximum Open Circuit Voltage	24Vdc
Output Current Ripple (in CC mode) (ripple = peak to average / average)	15% max. @ max. Iout Low frequency ( $\leq 120$ Hz) content <5%
Output Current Tolerance (at maximum output current)	<5%
CV Mode Load Type	Active CV loads not recommended
CV Mode Load Range (@ ~ 23.5V)	0.1 - 3.0Adc
Protections	Short Circuit, Open Circuit Protection for LED + and LED – and Temperature Foldback
Features	
0-10V Dimming <sup>3</sup>	150 $\mu$ A ( $\pm 3\%$ ) source current from driver. See dim curve for detail.
Environment & Approbation	
Operating Ambient Temp. Range	-40°C to +55°C
Max. Case Temperature (Tcase)	85°C
Agency Approbations	UL 8750, CSA 250.13 Class P
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Audible Noise	<24dB Class A
Weight	1.4 Lbs / 0.63 kgs

1. Philips 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.
2. For active constant voltage (CV) loads, operation with desired CV loads must be verified for the load range specified in the end application.
3. 0-10V dimming only applicable in constant current (CC) mode.

# Xitanium 72W 3.0A 0-10V dimming

## Electrical Specifications

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

### 0-10V Dimming Curve

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

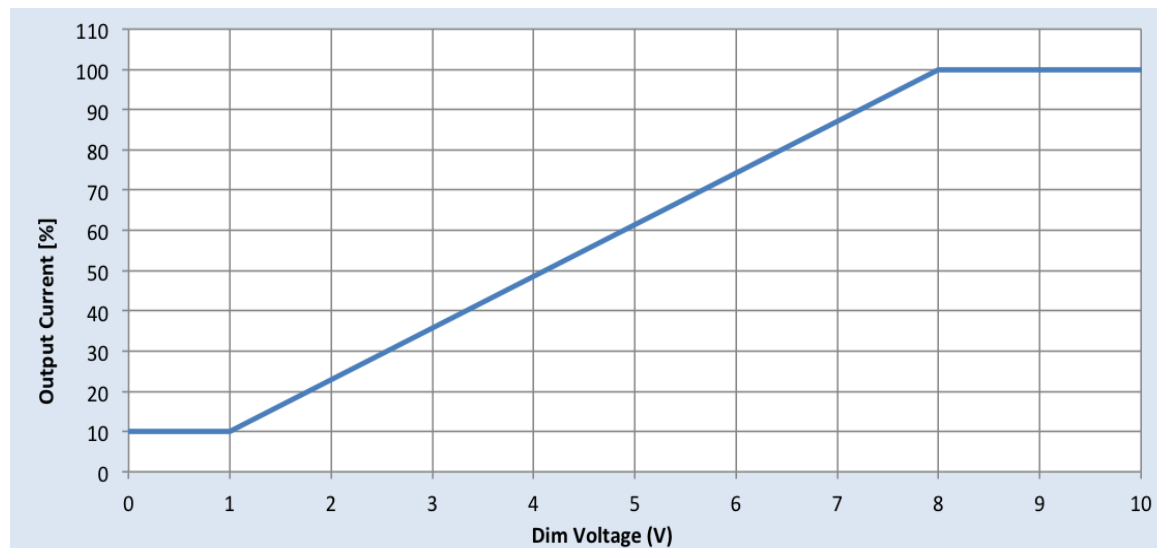
Minimum dim level: Factory default 10% of Iout

Maximum output voltage on the dimming wires: 12V

0-10V dimming is applicable in CC mode only. Max voltage of load at the output of the driver should be less than 23.5V to be in CC mode.

### 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
Philips	Sunrise - SR1200ZTUNV

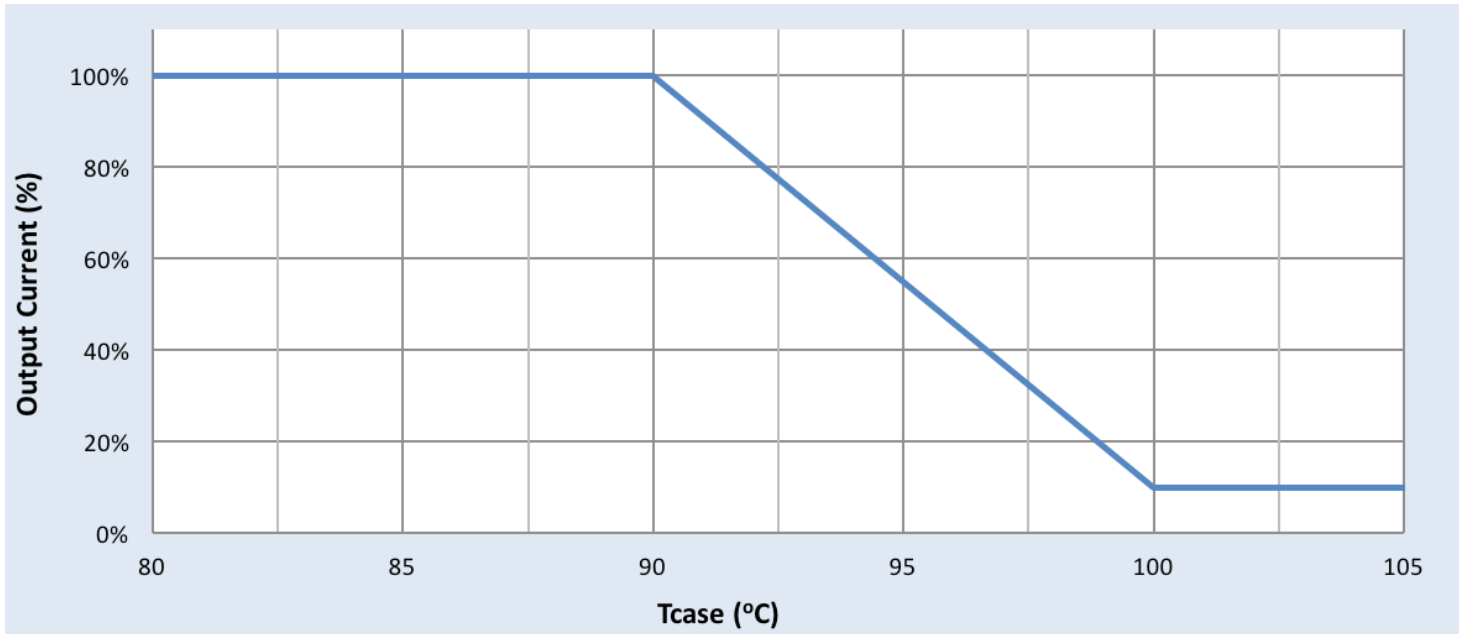


# Xitanium 72W 3.0A 0-10V dimming

## Electrical Specifications

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

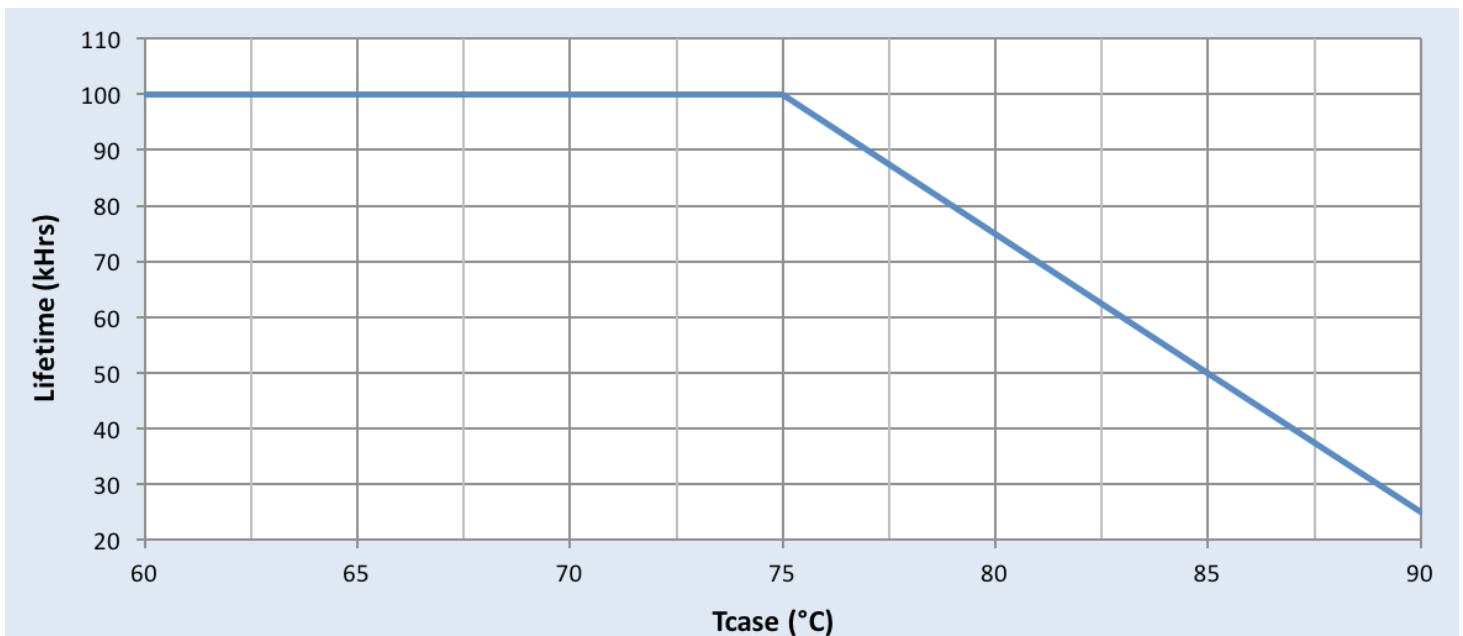
### Output Current Vs. Driver Case Temperature



### Note

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

### Driver Lifetime Vs. Driver Case Temperature

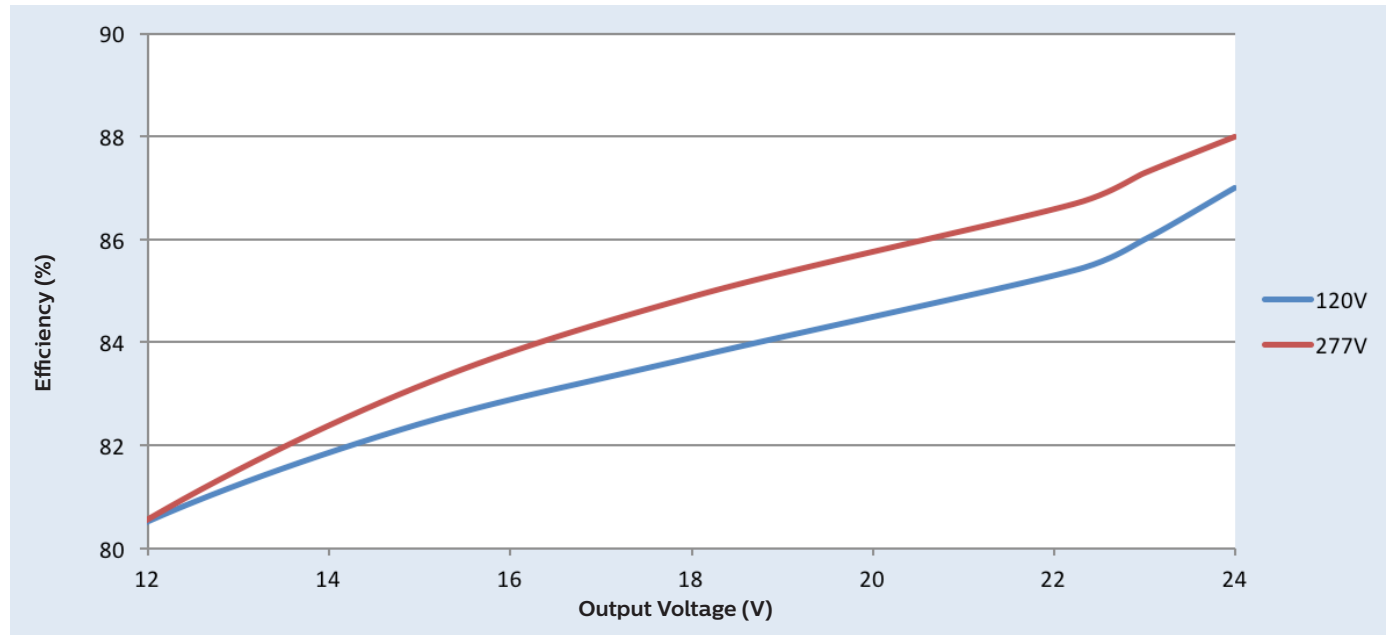


# Xitanium 72W 3.0A 0-10V dimming

## 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

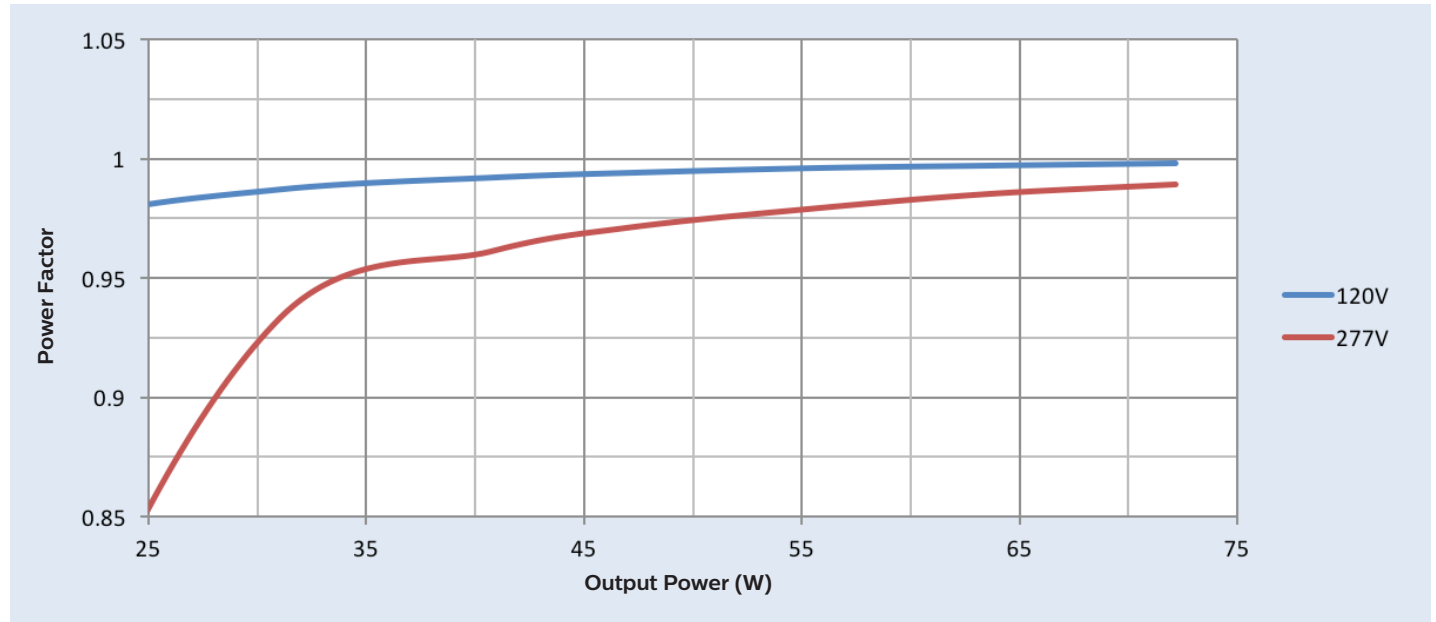


# Xitanium 72W 3.0A 0-10V dimming

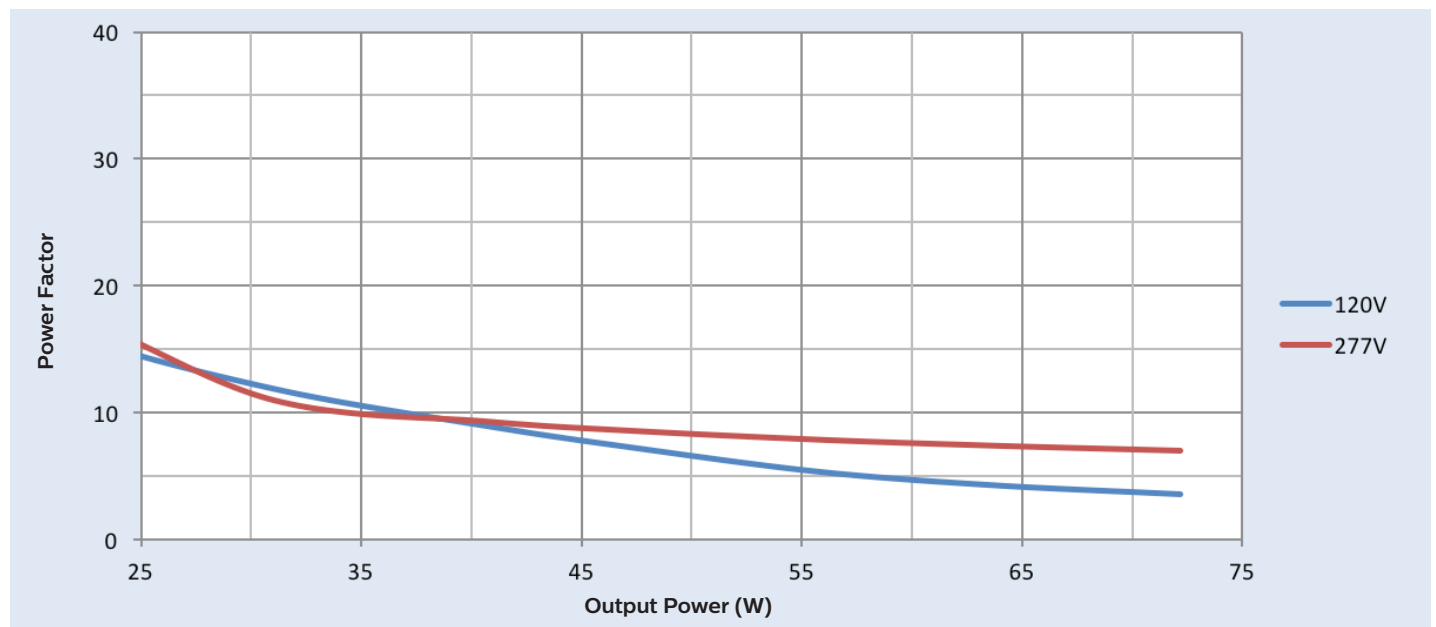
## Performance Characteristics

Based on measurements on a typical sample at 75°C case. The accuracy of the measurements is within the tolerance of the measurement instruments.

### Power Factor Vs. Output Power

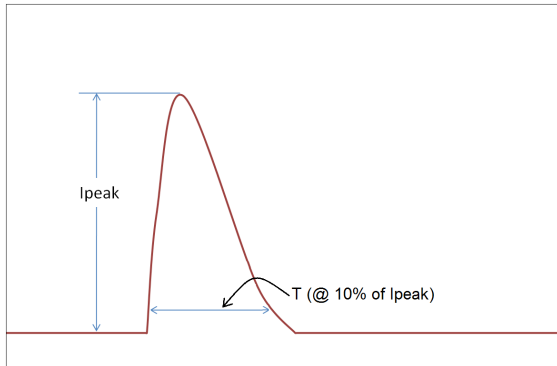


### Total Harmonic Distortion (THD) Vs. Output Power



# Xitanium 72W 3.0A 0-10V dimming

## Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)
120 Vrms	27.7A	187.5µS
277 Vrms	87A	178µS

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)	4kV	4kV

## Isolation

Isolation	Input	Output	0-10V	Enclosure
Input	NA	2xU+1kV	2.5kV	2xU+1kV
Output	2xU+1kV	NA	2.5kV	500
0-10V	2.5kV	2.5kV	NA	2xU+1kV
Enclosure	2xU+1kV	500	2xU+1kV	NA

U = Max. input voltage

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