PHILIPS ADVANCE

LED Driver

Xitanium

60W 120V 5A Fixed LED120A0012V50F









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 Philips 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 even in rugged applications. They operate to specification under wide temperature and electrical ranges to help ensure reliability.

Specifications

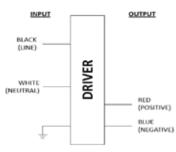
Input Voltage (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max Load and 70°C Case	Max Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection (Combi-Wave, KV)	Envir. Protection Rating
120	60	12	0.8-5	81	90°C	0.63	75	<20%	>0.95	2.5	UL damp & dry and Type HL

Enclosure

	In. (mm)
Case Length	8.34 (211.8)
Case Width	1.76 (42.5)
Case Height	1.1 (27.9)
Mounting Length	8.99 (228.4)
Overall Length	9.45 (240)



Wiring Diagram



Input and output use lead- wires. Lead-wires are 18AWG 105C/600V solid copper. Input Lead Length outside enclosure: 9" (+2"/-1"). Input Lead Length outside enclosure: 26" (+2"/-1"). Driver case must be grounded.

Features

- UL Class 2 output
- 50,000+ hour lifetime¹

Benefits

- Flexibility and ease of design for Class 2 luminaire designs
- \cdot Enables long life luminaire designs

Application

- Signage
 - Parking garages
- Wallpacks

Electrical Specifications

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

Product Data

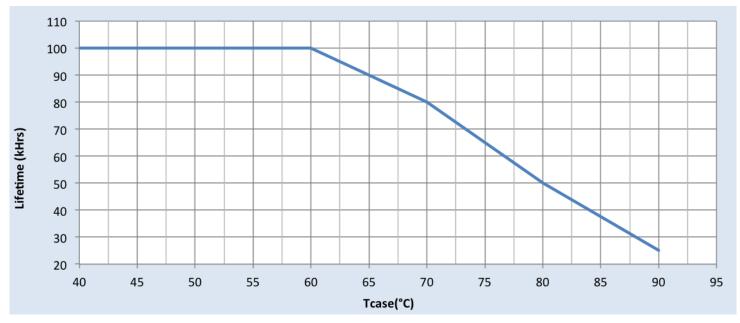
Order Information					
Full Product Code	LED120A0012V50FM (Mid-Pack, 20pcs/Box)				
Line Frequency	50/60Hz				
Min. Mains Voltage Operational	108 Vac				
Max. Mains Voltage Operational	132 Vac				
Output Information					
Maximum Open Circuit Voltage	12Vdc				
Output Current Ripple (ripple = peak to average / average)	<=35%				
Protections	Short Circuit, Open Circuit Protection for LED + and LED -				
Environment & Approbation					
Operating Ambient Temp. Range	-40°C to +60°C				
Max Case Temperature (Tcase)	90°C				
Environmental Protection Rating	UL dry and damp, Type HL				
Agency Approbations	UL879, UL1012, UL935, (cRUs/CSA)				
Electromagnetic Compliance	FCC Title 47 Part 15 Class A				
Audible Noise	<24dB Class A				
Weight	1.4Lbs/ .635kgs				

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 MTBF modeling.

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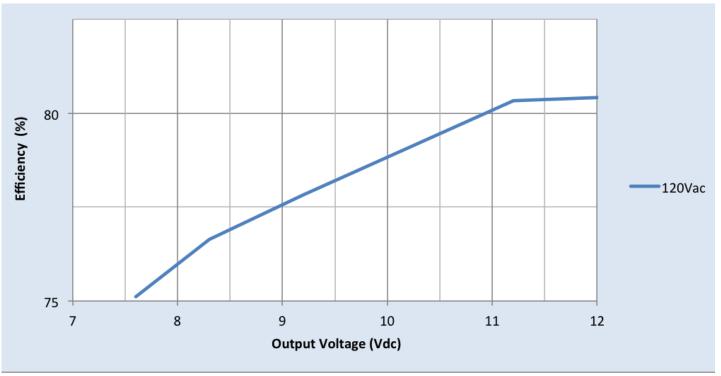




Performance Characteristics

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.

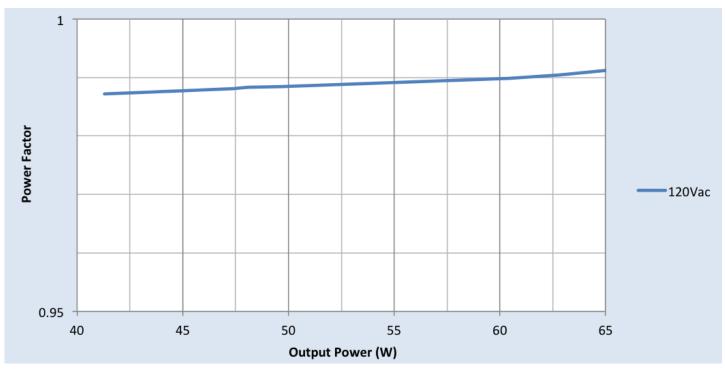
Efficiency Vs. Output Voltage at Max Current



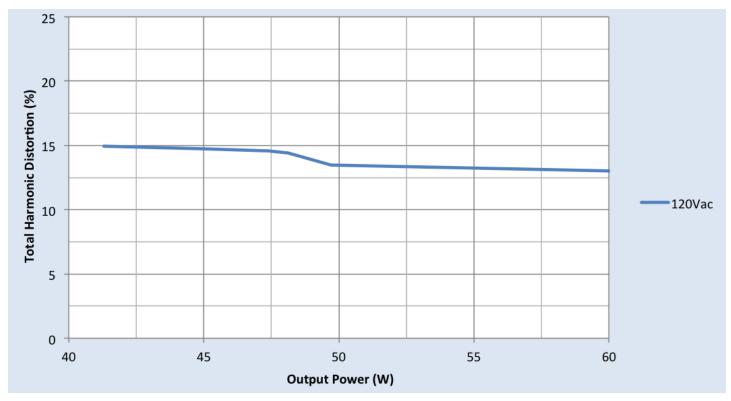
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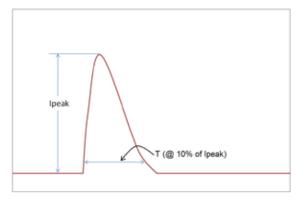
Power Factor Vs. Output Power



Total Harmonic Distortion (THD) Vs. Output Power



Inrush Current Info



Vin	lpeak	T (@ 10% of Ipeak)
120 Vrms	9A	59µS

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)	2.5kV	2.5kV

Isolation

Isolation	Input	Output	Enclosure	
Input	NA	2xU+1kV	2xU+1kV	
Output	2xU+1kV	NA	500V	
Enclosure	2xU+1kV	500V	NA	

U = Max input voltage

UL Conditions of Acceptability

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

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