

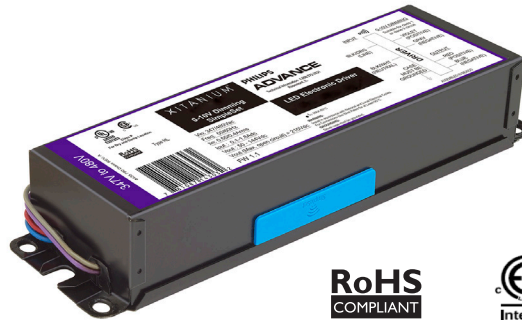
# PHILIPS ADVANCE



## LED Driver

### Xitanium

180W 0.1-1.25A 0-10V Dimming  
with SimpleSet and Aux. Output  
XH180C125V200PSF1



**RoHS**  
COMPLIANT

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

**UL** US  
**LISTED**  
**E321253**  
Class P  
For Dry and Damp Location

**SP**  
US

Philips Advance Xitanium LED drivers with SimpleSet technology and auxiliary power supply extend the driver application scope to include simple self-contained control solutions for luminaires. The driver provides an additional auxiliary output for powering simple sensors (occupancy/photocell), and the driver has a built-in standby mode through the 0-10V leads. The additional auxiliary power output eliminates the need for a mains relay or power pack for the sensor and allows the sensor to turn the driver on/off and also operate the dimming function.

### Specifications

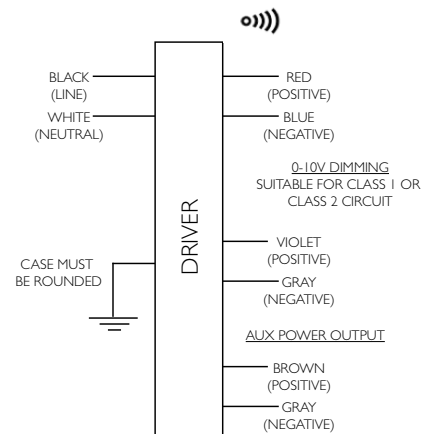
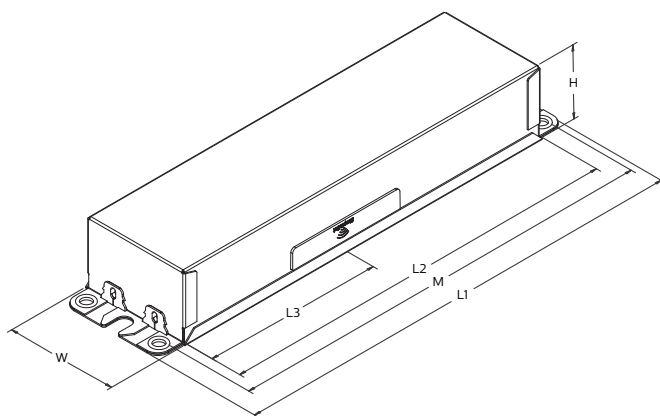
Input Voltage (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max. Load and 75°C Case	Max. Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max. Load (%)	Power Factor @ Max. Load	Surge Protection (Combi-Wave, KV)	Envir. Protection Rating	Dimming	Dimming Range (with specified dimmers)	Min. Output Current (A)
347	180	70-210	0.1 - 1.25	92.4	Life - 85°C UL - 90°C	0.56	200	<10%	>0.95	6	UL damp & dry and Type HL	0-10V Analog Class 1 and 2 Wiring	10% ~ 100%	0.07
480				93.3		0.4								

### Enclosure

	In. (mm)	Tolerance
Case Length (L2)	8.31 (211.0)	± 0.5mm
Case Width (W)	2.31 (58.0)	± 0.5mm
Case Height (H)	1.48 (37.6)	± 1.0mm
Mounting Length (M)	8.91 (226.2)	± 0.5mm
Overall Length (L1)	9.45 (240.0)	± 1.0mm
Center of SimpleSet Antenna (L3)	3.75 (95.3)	± 1.0mm

### Wiring Diagram

	Wire Length (mm)
Black/Orange (Line)	270 (± 30)
Black/White (Neutral)	270 (± 30)
Red (Positive, LED output)	270 (± 30)
Blue (Negative, LED output)	270 (± 30)
Violet (Positive, 0-10V)	270 (± 30)
Gray (Negative, 0-10V)	270 (± 30)
Brown (Positive, Aux power output)	270 (± 30)
Gray (Negative, Aux power output)	270 (± 30)



# Xitanium 180W featuring SimpleSet technology with auxiliary output and dimming with standby

## Features

- 50,000+ hour lifetime<sup>1</sup>
- Programmable output current through SimpleSet technology
- Large operating window
- 6kV combi-wave surge rating to comply with ANSI C82.77-5 CAT C low
- Auxiliary power output
- 0-10V dimming with ON/OFF functionality

## Benefits

- Enables long life luminaire designs
- Fast and simple way of programming
- No external surge protection required to pass C82.77-5 CAT C low
- Aux power output is a great alternative to using 347V or 480V power packs which are expensive.
- The driver can be turned ON/OFF using a passive low-voltage control device or relay

## Application

- Area
- Roadway
- Parking garages
- Floodlights
- High-bay and mid-bay

## Electrical Specifications

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

## Product Data

Order Information	
Full Product Code	XH180C125V200PSF1M (Mid-Pack, 10pcs/Box), 12NC: 929001705513
Line Frequency	50/60Hz
Min. Mains Voltage Operational	312 Vac
Max. Mains Voltage Operational	528 Vac
Output Information	
Maximum Open Circuit Voltage	290Vdc
Output Current Ripple (ripple = peak to average / average)	15% max @ max Iout (Low frequency ripple (≤120Hz) content <5%)
Output Current Tolerance (in performance window)	<5%
Protections	Short Circuit, Open Circuit Protection for LED + and LED – and Temperature Foldback
Features	
Auxiliary Power Supply Output	
Nominal Aux. Output Voltage	24Vdc (± 10%, including line and load regulation)
Maximum Aux. Output Voltage Ripple (peak/average)	2%
Rated Aux. Output Power	3W
Peak Power (<10s)	4W
Max. Output Current at Aux output port	125mA. See Aux. Output for details.
Turn-on Time (from mains applied to output within 90%)	<220 milliseconds
Max. Voltage Overshoot during Turn ON	30Vdc
Max. Voltage Undershoot during Turn ON	8Vdc
Max. Hold-up Time after Mains Power OFF (20mA load)	75 milliseconds (until the aux output voltage drops out of nominal range)
Protections	Short Circuit & Open Circuit Protection for Aux. + and Aux. – and Over-temperature Foldback

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.

# Xitanium 180W featuring SimpleSet technology with auxiliary output and dimming with standby

## Electrical Specifications

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

## Product Data (continued)

<b>0-10V Dimming Interface</b>	
<b>Dimming Source Current</b>	100-250 $\mu$ A (for dimming voltage >1V)
<b>0-10V Active Range</b>	1V to 8V. See dim curve for details.
<b>0-10V Turn OFF Threshold</b>	<0.5V
<b>0-10V Turn ON Threshold</b>	>0.8V
<b>Protections</b>	Short Circuit & Open Circuit Protection for Dim + and Dim – and protected against accidental mains applied on dimming input
<b>Programmable Features</b>	
<b>AOC (adjustable output current)</b>	0.1A-1.25A via SimpleSet (Factory Default at 1.05A)
<b>Additional Configurable Features</b>	Adjustable Min. Dim Level, Adjustable Lumen Output, Adjustable Lumen Output Min., OEM Write Protection
<b>Environment &amp; Approbation</b>	
<b>Operating Ambient Temp. Range</b>	-40°C to +55°C
<b>Max. Case Temperature (Tcase)</b>	90°C
<b>Agency Approbations</b>	UL 8750, CSA 250.13
<b>Electromagnetic Compliance</b>	FCC Title 47 Part 15 Class A
<b>Audible Noise</b>	<24dB Class A
<b>Weight</b>	2.1 Lbs / 0.95 kgs

2. Input standby power is < 0.5W when no load on aux. output. With about 0.3W load on aux. output, the input standby power is < 1W.