



# Versatility Delivered with Intelligent Sign Drivers

## Xitanium® LED Drivers for 12vdc and 24vdc LED Systems

Using state-of-the-art technology, Xitanium drivers for 12vdc and 24vdc LED systems deliver solid performance, high reliability and full compatibility with a variety of 12 and 24 volt LED lighting systems, including the latest in Luxeon technology.

Unique in the marketplace, these Xitanium LED drivers also feature our exclusive IntelliVolt™ multiple-voltage technology, enabling them to operate at any input voltage from 120 to 277 volts, 50/60 Hz, and thus establish the industry's first "intelligent" sign driver.

Ideal for channel letter, architectural, contour, edge or orientation/step lighting applications, Xitanium drivers for 12vdc and 24vdc LED systems feature a compact, leaded design, are rated\* for 50,000+ hours of life and carry a full five-year warranty.

### UL Class 2 Rated

- Limited output voltage and current, plus isolation for safer operation

### UL Outdoor Damp location rated - IP66

- Fully potted for moisture resistance and thermal benefits

### Extreme low temperature performance (-40°C)

- Allows use in any outdoor application

### Generous high temperature capability (+60°C ambient; 80°/90°C case rating)

- Margin flexibility to facilitate fixture design

### Tightly regulated output (1% line, 5% load)

- Consistent light output across line and load levels

**PHILIPS**  
**ADVANCE**

## LED Driver Specifications

- UL and cUL recognized (file no. E220165; E215167)
- EMI: FCC Class A
- UL file number: e220165; e215167
- Current Crest Factor: 1.5 maximum
- Total Harmonic Distortion: 20% maximum
- Environmental Protection: IP66 outdoor rated
- Load Regulation: 5% output current variation across load range
- Line Regulation: 1% output voltage variation across input voltage range
- Protection: Meets UL 1310 for Class 2; Inherent short-circuit protection, self limited; overload protected; 3.2kv hz output isolation

## Installation Highlights

- LED drivers must be installed inside an electrical enclosure
- Input wiring must be routed inside conduit
- A channel letter could be considered an electrical enclosure, if certified by an external agency such as UL
- Wiring used inside electrical enclosure must meet UL Style 1316 (105°C, 600V) at a minimum
- No conduit may be required on the UL Class 2 output outlet if wire used is PLTC type

Output Power (W)		Output Voltage (V)	Output Current (Amps)	Min/Max Ambient Temp (C/F)	Input Volts	Catalog #	Certifications		Input Current Max (A)	Input Power Max (W)	Max. THD %	Power Factor	Env. Rating	Fig/ Diag
Max	Min						CSA	UL						
4	2	12	-	-10°C/40°C	120 230	LEDUNIA0350C12F*		Y	0.12 0.06	7	20	0.5	Dry	G
8	2	12	-	-10°C/40°C	120 230	LEDUNIA0700C12F*		Y	0.25 0.13	15	20	0.5	Dry	G
12	2	12	-	-40°C/60°C	120	LED120A0012V10F	Y	Y	0.13	15	20	0.9	Dry, Damp	B
17	2	24	-	-40°C/60°C	120	LED120A0700C24F	Y	Y	0.18	21.6	20	0.9	Dry	A
17	2	24	-	-40°C/60°C	120	LED120A0700C24FO	Y	Y	0.18	21.6	20	0.9	Dry, Damp	B
25	3	12	-	-40°C/60°C	120	LED120A0012V21F	Y	Y	0.25	30.4	20	0.9	Dry	C
25	3	24	-	-40°C/60°C	120	LED120A0024V10F	Y	Y	0.25	30.4	20	0.9	Dry	C
25	3	24	-	-40°C/60°C	120	LED120A0024V10D‡	Y	Y	0.25	30.4	20	0.9	Dry	C
34	5	24	-	-40°C/60°C	120	LED120A1400C24F	Y	Y	0.33	40	20	0.9	Dry	C
34	5	24	-	-40°C/60°C	120	LED120A0024V14FO	Y	Y	0.33	40	20	0.9	Dry, Damp	D
40	5	24	-	-40°C/60°C	120	LED120A0024V18F	Y	Y	0.42	50	20	0.9	Dry	C
40	5	24	-	-40°C/60°C	120	LED120A0024V18FO	Y	Y	0.42	50	20	0.9	Dry, Damp	D
40	5	24	-	-40°C/60°C	277	LED277A0024V18F	Y	Y	0.18	50	20	0.9	Dry	C
60	10	12	-	-40°C/60°C	120	LED120A0012V50F	Y	Y	0.63	75	20	0.9	Dry, Damp	E
48	2	24	-	-40°C/60°C	120 230 277	LEDINTA0024V20FLO	Y	Y	0.47 0.24 0.20	56	20	0.9	Dry, Damp	F
60	2	12	-	-40°C/60°C	120 230 277	LEDINTA0012V50FO	Y	Y	0.58 0.30 0.25	70	20	0.9	Dry, Damp	E
67	2	24	-	-40°C/60°C	120 230 277	LEDINTA0024V28FO	Y	Y	0.65 0.34 0.28	78	20	0.9	Dry, Damp	E
72	2	24	-	-40°C/60°C	120 230 277	LEDINTA0024V30FLO	Y	Y	0.70 0.37 0.30	84	20	0.9	Dry, Damp	F
80	10	24	-	-40°C/60°C	120	LED120A0024V33F	Y	Y	0.80	95	20	0.9	Dry, Damp	E
100	2	24	-	-40°C/55°C	120 230 277	LEDINTA0024V41FO	Y	Y	1.00 0.51 0.42	117	20	0.9	Dry, Damp	E

‡ For dimming, reference the "Technical Requirements for Control Equipment" from the "Dimming Solutions for LED Lighting" product bulletin (form No. LE-6100).  
\* 2 year warranty, 20,000 hour lifetime.

For the most up-to-date data on LED drivers, visit [www.philips.com/advance](http://www.philips.com/advance) or consult your sales representative.

## Mechanical Dimensions

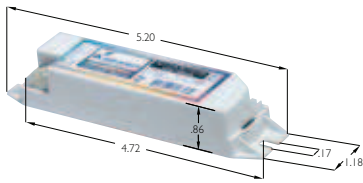


Fig. A

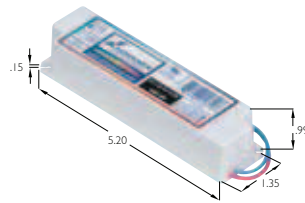


Fig. B

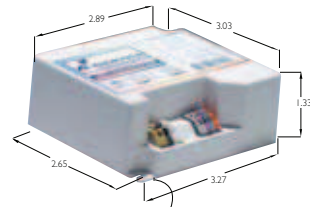


Fig. C

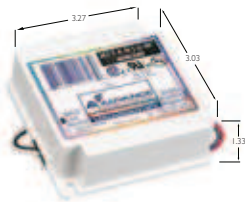


Fig. D

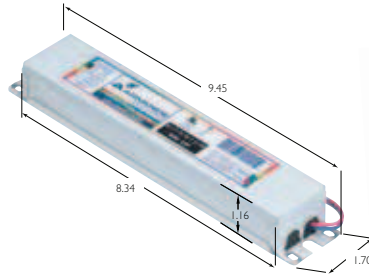


Fig. E

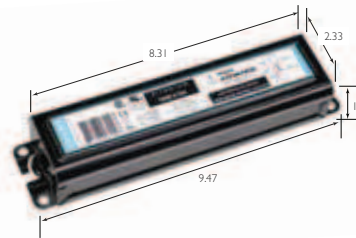


Fig. F

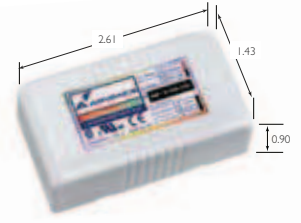


Fig. G

## Wiring Diagrams

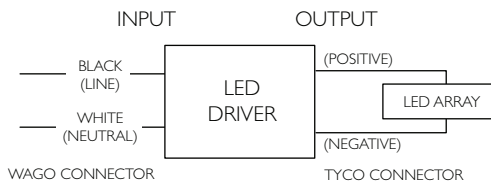


Fig. A

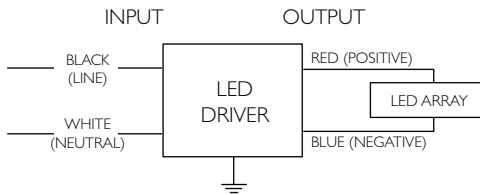


Fig. B, E, F

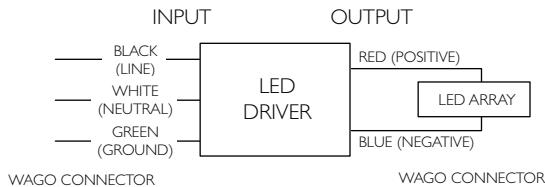


Fig. C

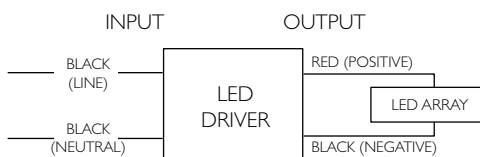


Fig. G

## Technical Information

### Figure A

**AC input:** WAGO 2-pin wire trap, 18AWG solid or tinned stranded wire Line (black), Neutral (white)  
**DC output:** Use Tyco-AMP connection cable I365323-I (Supplied by Future Electronics, 1-888-LUXEON2)

### Figure B & D

**AC input:** 6-inch 18AWG leads. Line (black), Neutral (white)  
**DC output:** 6-inch 18AWG leads. Positive (red), Negative (blue)

### Figure C

**AC input:** WAGO 2-pin wire trap, 18AWG solid or tinned stranded wire Line (black), Neutral (white), Ground (green)  
**DC output:** WAGO 4-pin wire trap, 20AWG solid or tinned stranded wire Positive (red), Negative (blue), 0 - 10vdc dimming controls (violet and grey, for dimming unit only)

### Figure E

**AC input:** 9-inch 18AWG leads Line (black) Neutral (white)  
**DC output:** 26-inch 18AWG leads Positive (red), Negative (blue)

### Figure F

**AC input:** 9-in 18AWG leads Line (black) Neutral (white)  
**DC output:** 9-in 18AWG leads Positive (red), Negative (blue)

### Figure G

**AC input:** 9-in 18AWG leads Line (black) Neutral (black)  
**DC output:** 9-in 18AWG leads Positive (red) Negative (black)



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