



PLED-96W-HV Series

Rev 8-29-2017

High Voltage Input
Flicker-free, Hazardous Location LED Drivers



Electrical Specifications

Input Voltage Range:	277-480 Vac Nom. (XX-512 V Min/Max)
Frequency:	50/60 Hz Nom. (47-63 Hz Min/Max)
Power Factor:	>0.90 @ 60% load 277V-347V, 80% load 480V
Inrush Current:	<30.0 Amps max @ 277 Vac, cold start 25°C
Input Current:	0.45 Amps max
Maximum Power:	96W
Current Regulation:	± 3% Over input line variation
Load Regulation:	± 4%
THD:	≤ 20% @ 60% load, 277V through 480V
Ripple & Noise: (Vpk-pk)	5% Vo max @ 20 MHz BW, Full load output in parallel with 0.1 µF ceramic & 10 µF Electrolytic
Ripple: (Ipk-pk)	5% Io max @ 20 MHz BW, Full load output in parallel with 0.1 µF ceramic & 10 µF Electrolytic. 120 Hz component (Flicker Free)
Start-up Time:	200mS typical @ Full Load, 120Vac/60Hz (1000mS max)
Leakage Current:	700µA typical
Hold Up Time:	Half Cycle

Protections

Over-voltage	Output
Over-current	Output
Short Circuit	Auto Recovery

Environmental Specifications

Max Case Life Temp: (5 year warranty)	71°C
Maximum Case Temp (UL):	90°C
Minimum Starting Temp:	-30°C
UL Type TL Rating:	Class 2: 90/66°C; Non-Class 2: 90/66°C
Storage Temperature:	-40°C to +85°C
Humidity:	5% to 95%
Cooling:	Convection
Vibration Frequency:	5 to 55 Hz/2g, 30 minutes
Sound Rating:	Class A
Impact Resistance:	1g/s
MTBF:	474,000 Hours @ full load and 40°C ambient conditions per MIL-217F Notice 2
EMC:	FCC 47CFR Part 15 Class B compliant
Weight:	32.1 oz. (910 grams)

- Total Power: 96 Watts
- Input Voltage: 277-480 Vac Nom.
- UL Dry & Damp Location Rated, IP66 & NEMA6
- UL Type TL
- High Power Factor
- UL Type HL Rated for Hazardous Locations
- Black Magic Thermal Advantage™ Aluminum Housing

Note:

LED drivers are designed and intended to operate LED loads only. Non-LED loading may be outside the specified design limits of our LED drivers, and therefore cannot be covered by any warranty. If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.

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Constant Current Models

Model	Output Current (mA ±5%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Max Efficiency
PLED96W-274-C0350-XX-HV	350	92-274	96	88%
PLED96W-213-C0450-XX-HV	450	71-213	96	88%
PLED96W-137-C0700-XX-HV	700	46-137	96	86%
PLED96W-092-C1050-XX-HV	1050	31-92	96	86%
PLED96W-069-C1400-XX-HV	1400	23-69	96	86%
PLED96W-054-C1750-XX-HV	1750	18-54	96	85%
PLED96W-048-C2000-XX-HV	2000	16-48	96	85%
PLED96W-046-C2100-XX-HV	2100	16-46	96	85%
PLED96W-039-C2450-XX-HV	2450	14-39	96	84%
PLED96W-036-C2660-XX-HV	2660	12-36	96	84%
PLED96W-034-C2800-XX-HV	2800	12-34	96	84%
PLED96W-030-C3150-XX-HV	3150	10-30	96	84%
PLED96W-027-C3500-XX-HV	3500	9-27	96	83%
PLED96W-025-C3840-XX-HV	3840	9-25	96	83%
PLED96W-024-C4000-XX-HV	4000	8-24	96	81%
PLED96W-020-C4800-XX-HV	4800	7-20	96	81%
PLED96W-018-C5350-XX-HV	5350	6-18	96	81%

-XX indicates dimming options are available. See options below. Blank = fixed current output

Constant Voltage Models

Model	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max. Output Power (W)	Max Efficiency
PLED96W-018-HV	18	1338-5350	96	81%
PLED96W-020-HV	20	1200-4800	96	81%
PLED96W-024-HV	24	1000-4000	96	81%
PLED96W-025-HV	25	960-3840	96	83%
PLED96W-027-HV	27	875-3500	96	83%
PLED96W-030-HV	30	788-3150	96	84%
PLED96W-034-HV	34	700-2800	96	84%
PLED96W-036-HV	36	665-2660	96	84%
PLED96W-039-HV	39	613-2450	96	84%
PLED96W-046-HV	46	525-2100	96	85%
PLED96W-048-HV	48	500-2000	96	85%
PLED96W-054-HV	54	438-1750	96	85%
PLED96W-069-HV	69	350-1400	96	86%
PLED96W-092-HV	92	263-1050	96	86%
PLED96W-137-HV	137	175-700	96	86%
PLED96W-213-HV	213	113-450	96	88%
PLED96W-274-HV	274	88-350	96	88%

Class 2: US/Canada

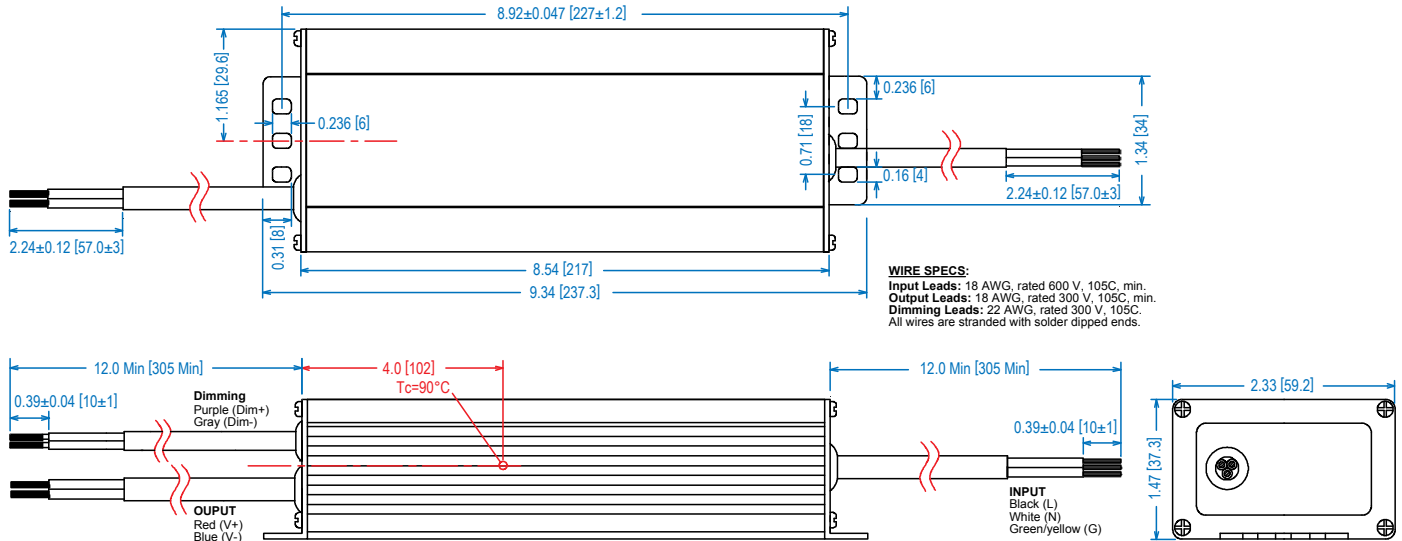
Dimming Option:

"-D" 0-10V & Resistance dimmable models include an extra two wires +Purple/-Gray on the output side. "-D" Compatible with most quality 0-10V wall dimmers. See page 3.

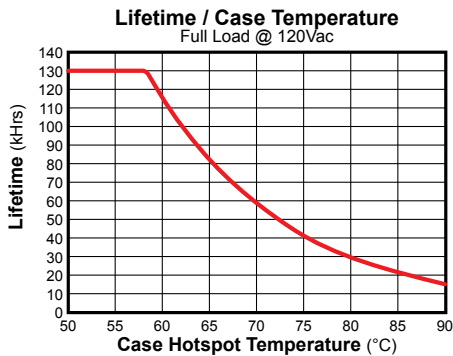
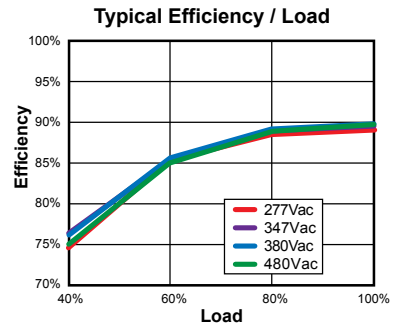
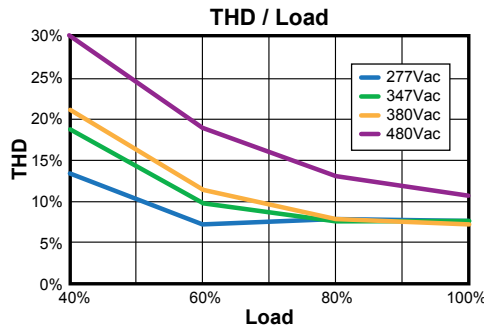
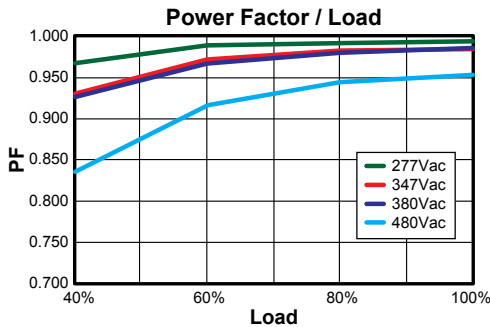


Dimensions

IN [mm]



Power Characteristics



Safety Cert.	Standard
UL/CUL	UL8750 Type HL, CSA-C22.2
CE	EN 61347
EMC Standard	Notes
FCC, 47CFR Part 15	Class B
EN 61000-3-2	
EN 61000-3-3	Class C
EN 61000-4-5	3kV-6kV 8-20 μsec surge protection

UL Conditions of Acceptability

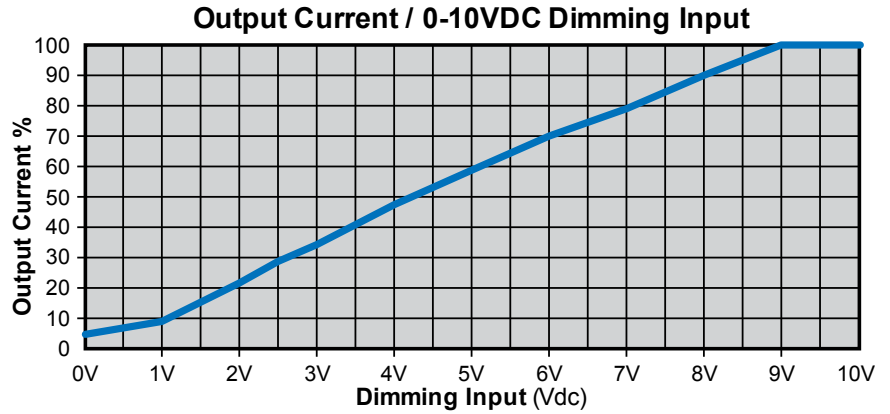
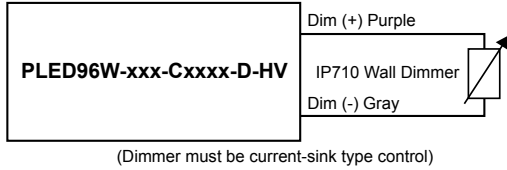
See website for additional information

Note: The area under the life-temperature curve represents where the driver has highly reliable operation within specification. Driver performance may drift out of published specifications as the hours of operation exceed the curve at a given temperature. Higher operating temperatures increase the chances of a failure to function. Other electrical, mechanical and environmental factors affect driver lifetime but are not represented in this calculation.

"-D" Option: 0-10VDC and Resistance Dimming

Parameters	Minimum	Typical	Maximum
Absolute Voltage Range on 0-10V (+) Purple Wire	-2.0V	—	+15V
Source Current out of 0-10V Purple Wire	0mA	—	2mA

Typical Dimming Circuit



Notes:

1. 0-10V dimmable version comes with an extra two wires +Purple/-Gray on the output side.
2. Compatible with most 0-10V Wall Slide dimmers and direct 0-10V analog signal. Recommended dimmer is Leviton IP710 or equivalent
3. 0-10V dimmable version is not intended to dim below about 5% @ 0V or 10% @ 1.0V
4. 0-10V dimmable version output will be 100% with Purple/Gray open and minimum with Purple/Gray Shorted.