

LED96W-LT Series

Line Voltage Dimmable
Constant Current LED Drivers



Electrical Specifications

Input Voltage Range:	120-277V models: 100-305V Min/Max
Frequency:	50/60 Hz Nom.
Power Factor:	≥0.90 @ 60% Load
Inrush Current:	<20 Amps @ 277Vac, cold start 25°C, max load
Input Current:	0.94 Amps @ 120Vac, 60Hz, max load
Maximum Power:	96W
Line Regulation:	± 3%
Load Regulation:	± 5%
THD:	≤20% @ ≥ 60% load
Start-Up Time:	0.7 seconds

Protections

Over-voltage	Over-Voltage, Over-Current
Short Circuit	Auto Recovery

Environmental Specifications

Maximum Case Temp.	90°C
Minimum Starting Temp:	-30°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
Lifetime:	50,000 hrs @ Tc=70°C (see graph for details)
MTBF:	375,000 Hours @ full load, 40°C ambient conditions per MIL-217F Notice 2
EMC:	FCC 47CFR Part 15 Class B compliant
Weight:	11.0 oz. (311 g)

- Total Power: 96 Watts
- Input Voltage: Universal 120-277Vac Phase Dimming Ranges
- CCR Dimming: <10% to ~100%, ELV & Triac dimmable drivers
- UL Dry & Damp Location Rated
- IP66 & NEMA4
- Compatible with leading and trailing edge dimmer controls
- Not for use with dimmers designed for magnetic loads
- Type HL Rated
- Compatible with Triac (leading edge) and ELV (electronic low voltage; trailing edge) dimmer controls
- Use a dimmer that closely matches the load, just slightly larger. (EX: For best performance, use a 150W rated dimmer for 100W total LED load instead of 600W dimmer.)
- Black Magic Thermal Advantage™ Plastic Housing



ELV & Triac Dimming Models

Model	Output Current (mA ±5%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency
LED96W-274-C0350-LT	350	162-274	96	92%
LED96W-137-C0700-LT	700	81-137	96	92%
LED96W-092-C1050-LT	1050	54-92	96	92%
LED96W-069-C1400-LT	1400	41-69	96	91%
LED96W-054-C1750-LT	1750	32-54	96	91%
LED96W-048-C2000-LT	2000	28-48	96	90%
LED96W-039-C2450-LT	2450	23-39	96	90%
LED96W-030-C3150-LT	3150	18-30	96	90%
LED96W-024-C4000-LT	4000	14-24	96	89%

Class 2: US/Canada

Safety Certification Standard

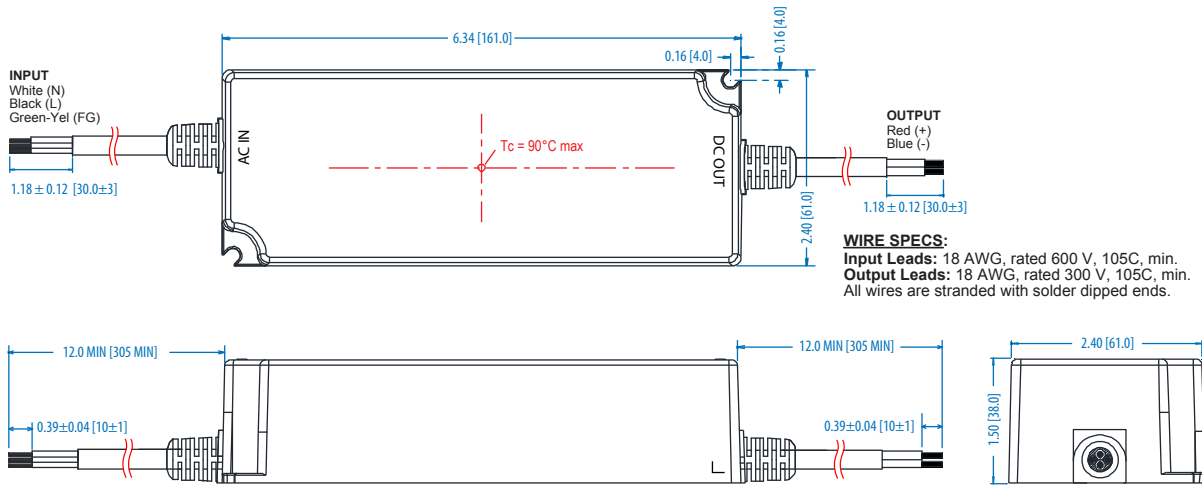
UL/CUL	UL8750, UL1310 for UL Class 2 & CAN/CSA C22.2 No. 250.13, UL Type HL
Withstand Voltage	Input to Output: 3750 Vac
Isolation Resistance	Input to Output: >100 MΩ, 500VDC @ 25°C, 70 % RH
Dimming Circuit	Dimmable by Forward Phase (Incandescent) or Reverse Phase (ELV) dimmers. Dimmer must be properly loaded.

EMC Standard Notes

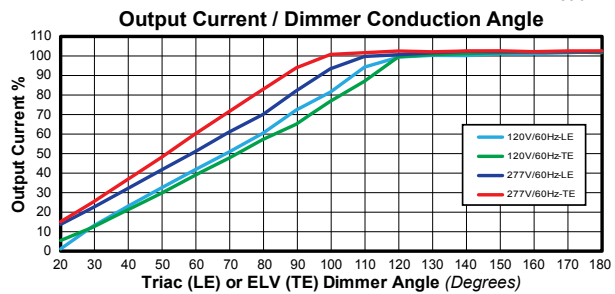
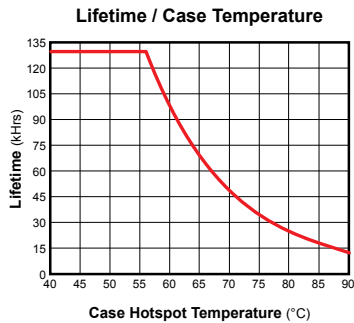
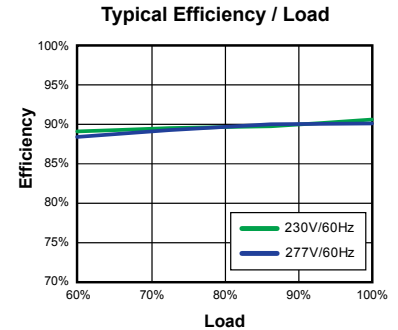
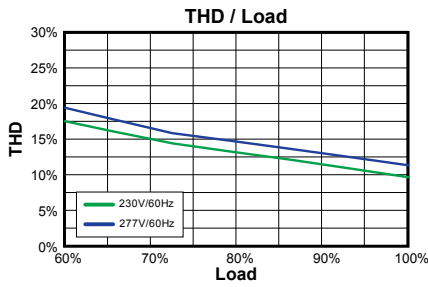
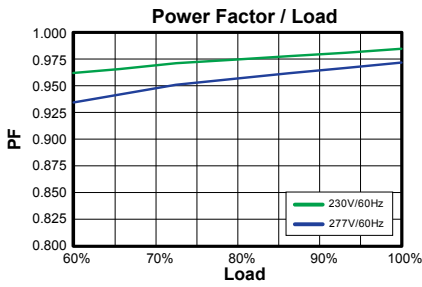
FCC, 47CFR Part 15	Class A
EN 61000-3-2	Limits for harmonic current emissions Class C, ≥80% Rated Power
EN 61000-3-3	Limitation of voltage changes, voltage fluctuations and flicker.
EN 61000-4-5	Surge Immunity Test, 2 kV L-N, 4 kV L-FG & N-FG
Energy Star	ANSI/IEEE C62.41.1-2002 and ANSI/IEEE C62.41.2-2002



Dimensions



Power Characteristics



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