Thomas Research Products

LED100WPS1-24
Switch Mode LED Driver
Constant Voltage with Isolation
White Steel Case

Electrical Specifications

Input Voltage Range:	**120-277 Vac Nom. (108-305Vac)**
Frequency:	**50/60 Hz Nom. (47-63 Hz Min/Max)**
Power Factor:	**>0.90 @ 80-100% load, 120V-277V**
Inrush Current:	**20A @ 230V**
Max Input Current:	**0.985A @120Vac; 0.43A @277Vac**
Maximum Power:	**100W**
Line Regulation:	**± 1%**
Load Regulation:	**± 2%**
THD:	**≤ 20% @ 80-100% load, 120V-277V**
No Load Power Consumption	**< 2W**
Ripple & Noise (pk-pk)	**< 3%**
Withstand voltage	**Input to output, 2,800Vdc, 2mA**
Leakage Current:	**Maximum 0.5mA at 277Vac, 60Hz input**
Protection:	**Over current, over voltage, short circuit protection. Hiccup mode on all.**

Environmental Specifications

Minimum Starting Temp:	**-40ºC**
Maximum Case Temp.	**90°C**
Storage Temperature:	**-40ºC to +85ºC**
Humidity:	**5% to 95%**
Cooling:	**Convection**
Vibration Frequency:	**5 to 55 Hz/2g, 30 minutes**
Sound Rating:	**Class A**
Lifetime:	**50,000 hrs @ Tc=74°C** *(see graph for details)*
Weight:	**1.1 lbs (0.5 kg)**

- Total Power: 100 Watts
- Input Voltage: 120-277 Vac Nom.
- UL Dry & Damp Location Rated
- UL Type HL Rated for Hazardous Locations
- UL Sign Components Manual (S.A.M.)
- 5 year warranty

Constant Voltage - Product Specifications

Model Number	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max. Output Power (W)	Typical Efficiency
LED100WPS1-24 ●	24	0-4150	100	88%

Class 2: US/Canada

● **Indicates S.A.M.**

Safety Cert.	Standard
UL/CUL	UL8750, UL879, CAN/CSA-22.2 No. 250.13-12
CE	EN61347-1, EN61347-2-13

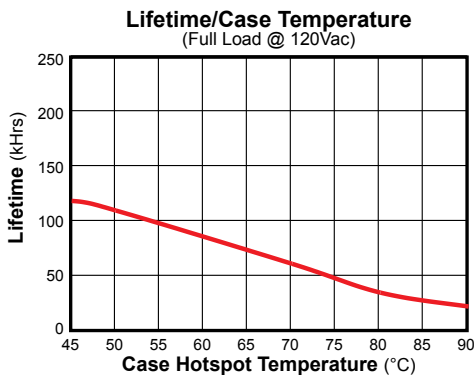| EMC Standard	Notes
FCC, 47CFR Part 15	ANSI C63.4:2009 Class B (Consumer Limit)
EN61000-3-2	Harmonic Current Emissions Class C

c **UL** US
E332160
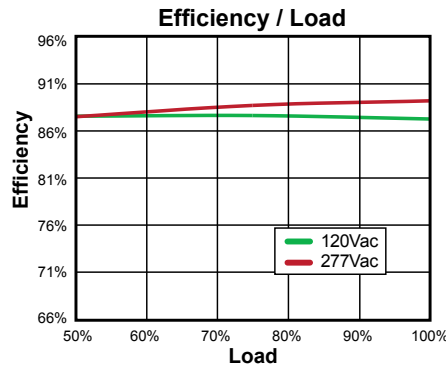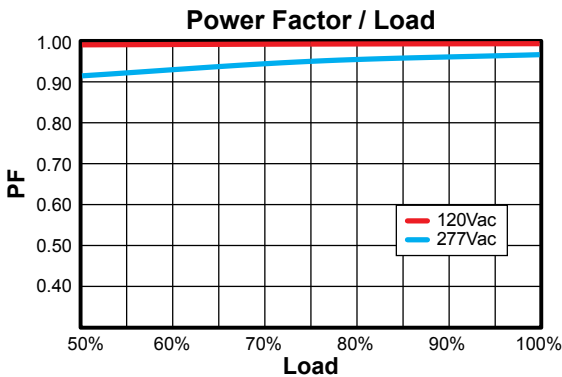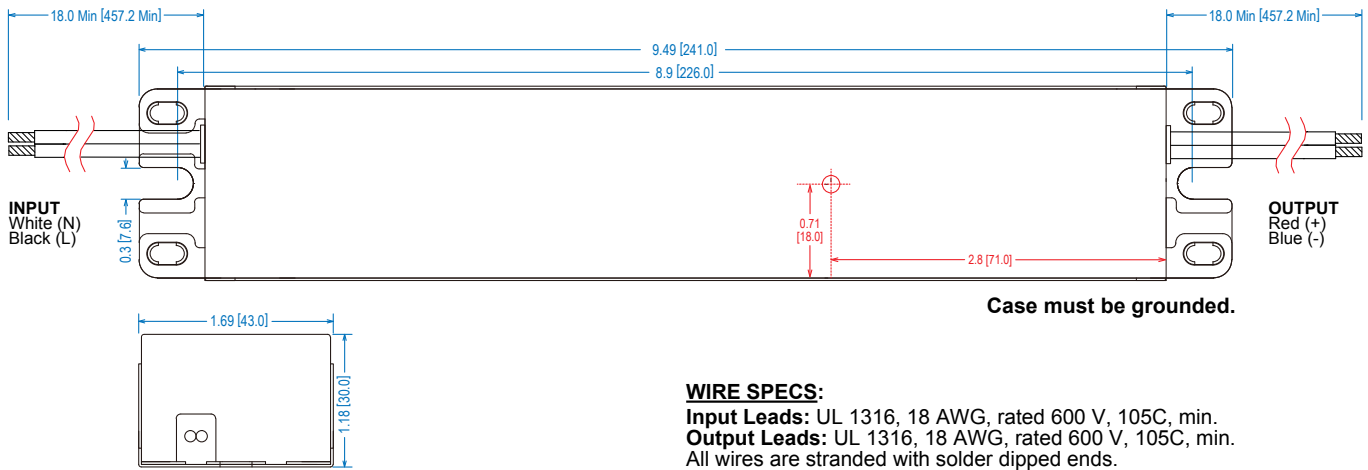
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RoHS

IP20

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.

Specifications subject to change without notice.

Rev 11-16-16

HUBBELL

Dimensions - Inches (mm)

18.0 Min [457.2 Min]
9.49 [241.0]
8.9 [226.0]
18.0 Min [457.2 Min]

0.3 [7.6]

INPUT
White (N)
Black (L)

0.71 [18.0]

2.8 [71.0]

OUTPUT
Red (+)
Blue (-)

Case must be grounded.

1.69 [43.0]

1.18 [30.0]

WIRE SPECS:
Input Leads: UL 1316, 18 AWG, rated 600 V, 105C, min.
Output Leads: UL 1316, 18 AWG, rated 600 V, 105C, min.
All wires are stranded with solder dipped ends.

Power Factor / Load

PF vs Load
- 120Vac
- 277Vac

Efficiency / Load

Efficiency vs Load
- 120Vac
- 277Vac

Lifetime/Case Temperature
(Full Load @ 120Vac)

Lifetime (kHrs) vs Case Hotspot Temperature (°C)

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.

UL Conditions of Acceptability

See website for additional information