VLED-40W Series

LED Drivers
Constant Voltage
Plastic Housing

Electrical Specifications

Input Voltage Range:	**100-277 Vac Nom. (90-305 V Min/Max)**
Frequency:	**50/60 Hz Nom. (47-63 Hz Min/Max)**
Power Factor:	**>0.90 @ full load, 100V through 277V**
Inrush Current:	**70 Amps max @ 220 Vac, cold start 25ºC**
Input AC Current:	**0.6 A max 100Vac, 0.3 A max 220Vac**
Maximum Power:	**42W**
THD:	**≤ 20% @ full load**
Line Regulation:	**± 2%**
Load Regulation:	**± 3%**
Leakage Current:	**0.75 mA max @ 277Vac 60Hz**
Turn-on Delay:	**0.6S @ 110Vac, 0.3S @ 220Vac Typical**
Output Ripple:	**50%, related to the Voltage-Current Curve of the LED**
No-load Power Dissipation:	**6W**
Protection:	**Over-Current, Over-Temperature (110º) and Short Circuit Protection with self-recovery**

Environmental Specifications

Minimum Starting Temp:	**-40ºC**
Maximum Case Temp.	**90°C**
Storage Temperature:	**-40ºC to +85ºC**
Humidity:	**5% to 100%**
Cooling:	**Convection**
MTBF:	**327,000 Hours @ 120Vac, 80% load and 25ºC ambient conditions per MIL-HDBK-217F**
Lifetime:	**116,000 Hours @ 120Vac, 80% load and 60ºC ambient**
EMC:	**FCC 47CFR Part 15 Class B compliant**
Weight:	**350 g**



- Total Power: 40 Watts
- Input Voltage: 100-277 Vac Nom.
- UL Dry & Damp Location Rated
- IP66
- High Power Factor with Active Correction
- Output Protection & Lightning Protection
- UL8750 and EN61347

Constant Voltage - Product Specifications

Model Number	Output Voltage *(Vdc ±5%)*	Output Current Range *(mA)*	Max. Output Power *(W)*	Typical Efficiency
VLED40W-012	12	0-3500	42 W	84%
VLED40W-024	24	0-1750	42 W	86%
VLED40W-036	36	0-1160	42 W	87%
VLED40W-048	48	0-875	42 W	89%

Class 2: US/Canada | US Only

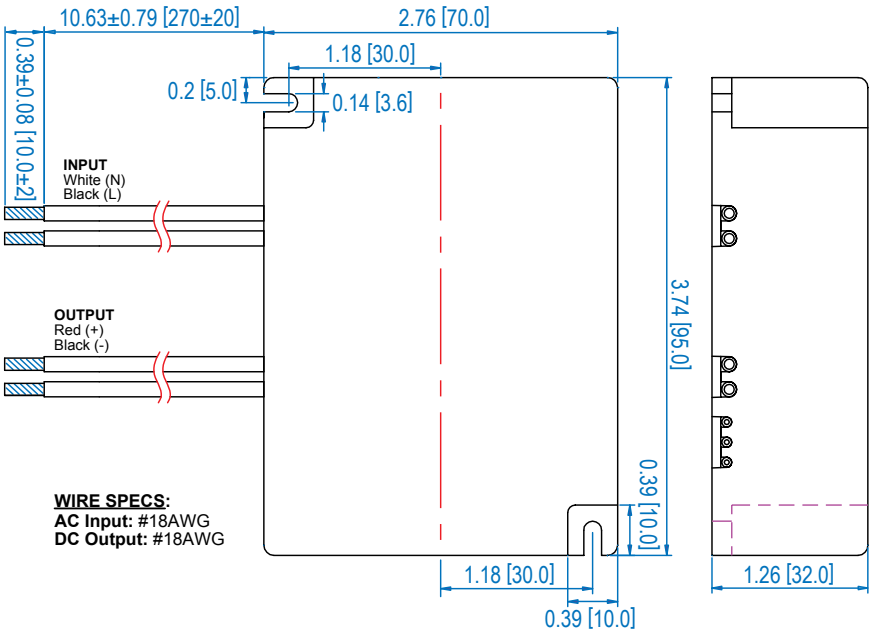
E332160

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.

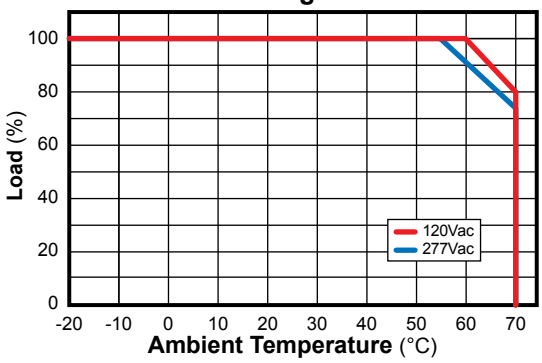
Specifications subject to change without notice.

Rev 8-25-15

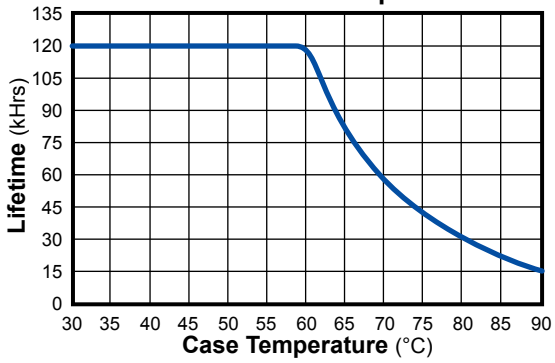
Dimensions - mm



Derating Curve



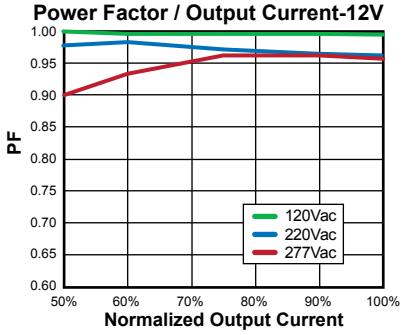
Lifetime / Case Temperature



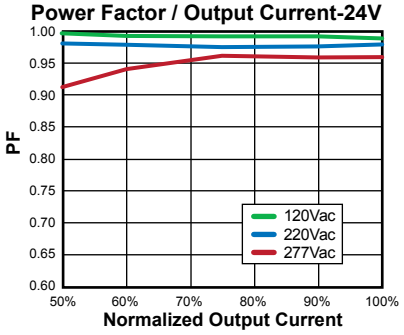
Safety and EMC Compliance	
UL/CUL	UL8750, UL1012, UL1310 Class 2, CSA-C22.2 NO. 223-M91 Class 2
C E	EN61347-1, EN61347-2-13
FCC Part 15 Class B	ANSI C63.4: 2009
EN55015	Conducted emission Test & Radiated emission Test
EN61000-3-2	Harmonic current emissions
EN61000-3-3	Voltage fluctuations & flicker
EN61000-4-2	Electrostatic Discharge (ESD): 4kV contact discharge, 8kV air discharge
EN61000-4-3	Radio-Frequency Electromagnetic Field Susceptibility Test-RS
EN61000-4-4	Electrical Fast Transient / Burst-EFT: Level 3, Criteria A
EN61000-4-5	Surge Immunity Test: AC Power Line: line to line 2 kV
EN61000-4-6	Conducted Radio Frequency Disturbances Test-CS
EN61000-4-8	Power Frequency Magnetic Field Test
EN61000-4-11	Voltage Dips
EN61547	Electromagnetic Immunity Requirements Applies To Lighting Equipment

Power Factor Characteristics

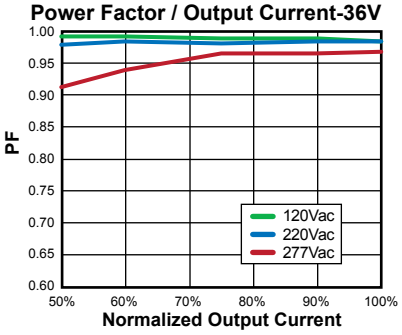
Power Factor / Output Current-12V



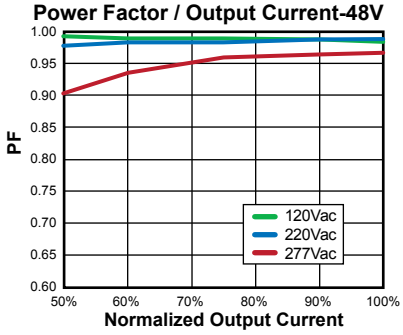
Power Factor / Output Current-24V



Power Factor / Output Current-36V

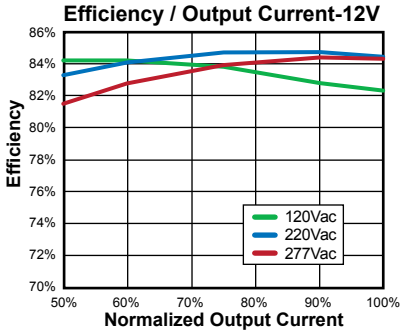


Power Factor / Output Current-48V

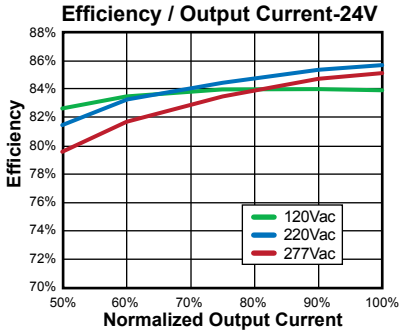


Efficiency / Load

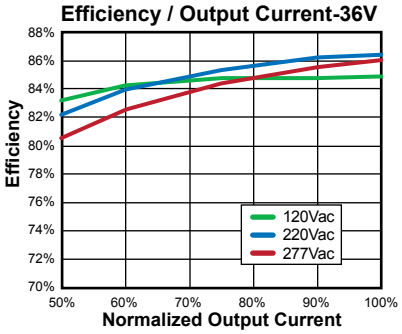
Efficiency / Output Current-12V



Efficiency / Output Current-24V



Efficiency / Output Current-36V



Efficiency / Output Current-48V

