



## VLED-25W Series

### Dimmable LED Drivers

### Constant Current & 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:	60 Amps max @ 230 Vac, cold start 25°C
Input AC Current:	0.4 A max @ 100Vac, 0.2 A max @ 220Vac
Maximum Power:	26W
THD:	≤ 20% @ full load
Line Regulation:	± 1% Constant Current, ± 2% Constant Voltage
Load Regulation:	± 3%
Leakage Current:	0.75 mA max @ 277Vac 60Hz
Turn-on Delay:	0.6S @ 110Vac, 0.3S @ 220Vac Typical
Ripple and Noise:	3-4% V <sub>o</sub>
Protection:	Over-Voltage, Over-Current, Over-Load and Short Circuit Protection with self-recovery

#### Environmental Specifications

Minimum Starting Temp:	-40°C
Maximum Case Temp.	90°C
Storage Temperature:	-40°C to +85°C
Humidity:	5% to 100%
Cooling:	Convection
Sound Rating:	Class A
MTBF:	200,000 Hr (cc) or 130,000 Hr (cv) @ 110Vac, 80% load and 25°C (MIL-HDBK-217F)
Lifetime:	91,000 Hours @ 120Vac, 80% load and 60°C ambient
EMC:	FCC 47CFR Part 15 Class B compliant
Weight:	200 g

#### Ordering Options:

-D: 0-10V dimmable version comes with an extra three wires +Purple/-Gray/Yellow on the output side. 0-10V Dimming is compatible with most quality 0-10V wall dimmers and direct 0-10V analog signal. See page 2 for additional specifications.



- Total Power: 25 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 Current - Product Specifications

Model Number	Output Current (mA ±5%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency
VLED25W-075-C0350-XX	350	38-75	26	86%
VLED25W-056-C0450-XX	450	28-56	26	85%
VLED25W-037-C0700-XX	700	19-37	26	85%
VLED25W-025-C1050-XX	1050	13-25	26	84%
VLED25W-019-C1400-XX	1400	10-19	26	82%
VLED25W-015-C1750-XX	1750	8-15	26	81%

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

#### Constant Voltage - Product Specifications

Model Number	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max. Output Power (W)	Typical Efficiency
VLED25W-024	24	0-1080	26	84%
VLED25W-036	36	0-720	26	85%
VLED25W-048	48	0-540	26	86%

Class 2: US/Canada US Only

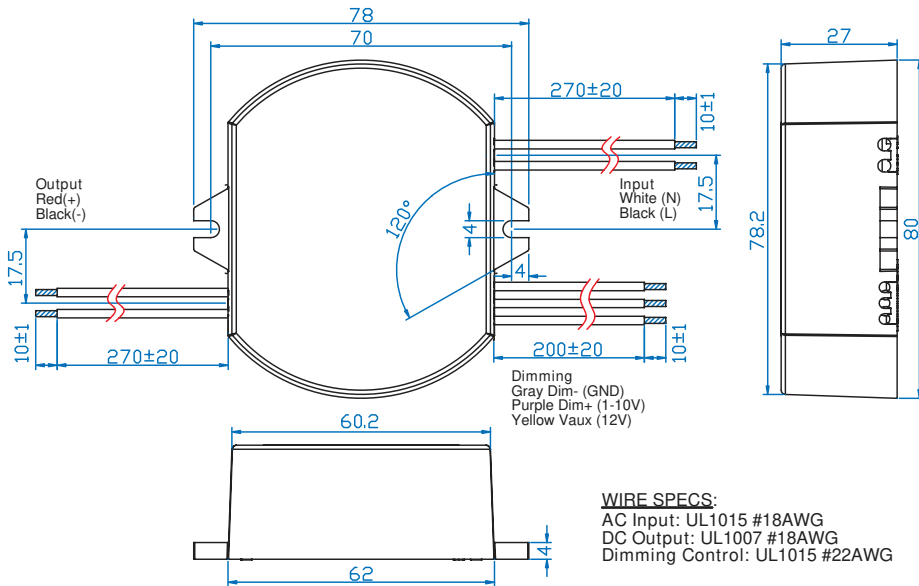


**Note:**  
LED drivers are designed and intended to operate LED loads only. Non-LED loading may be outside the specified design limits of our LED drivers, and therefore cannot be covered by any warranty. If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.

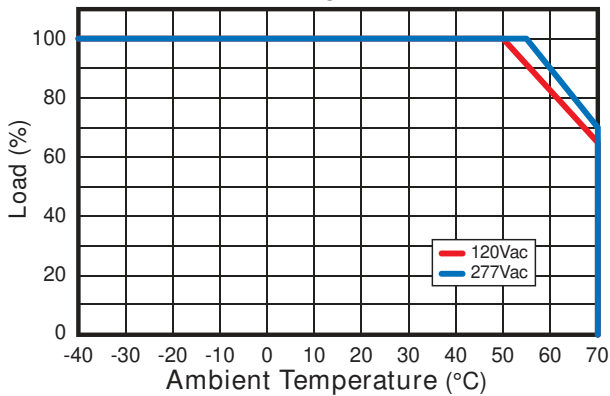
Specifications subject to change without notice.

Rev 6-6-16

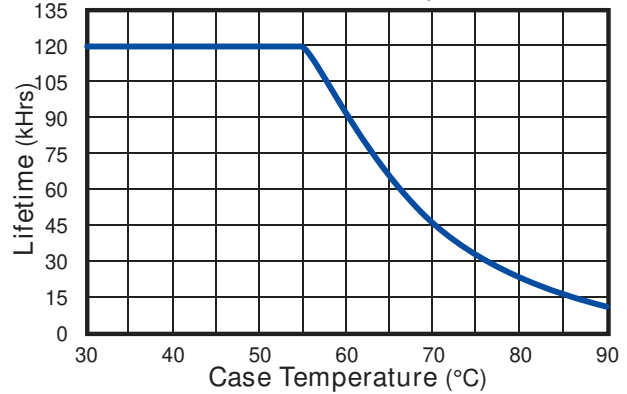




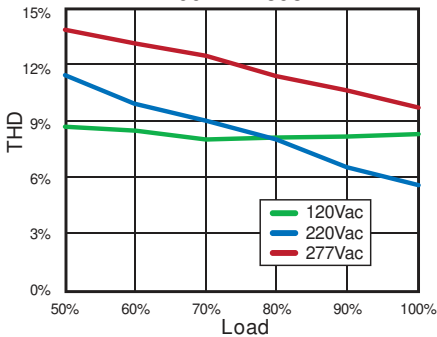
Derating Curve



Lifetime / Case Temperature

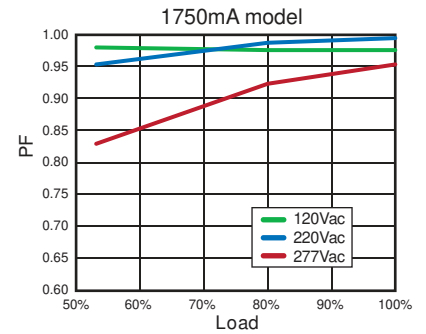
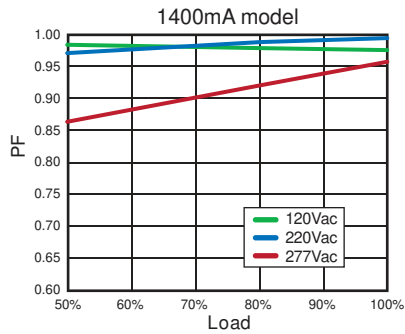
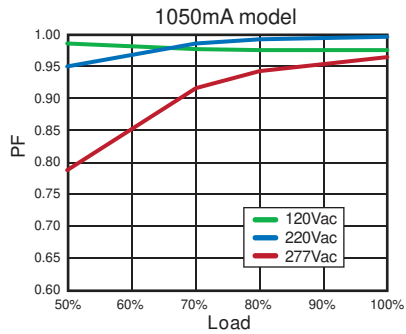
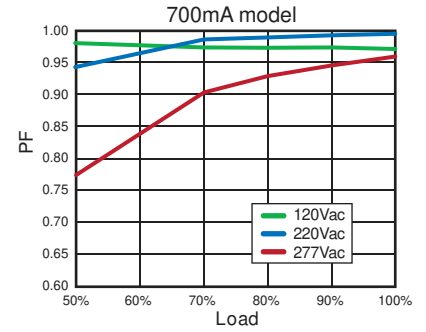
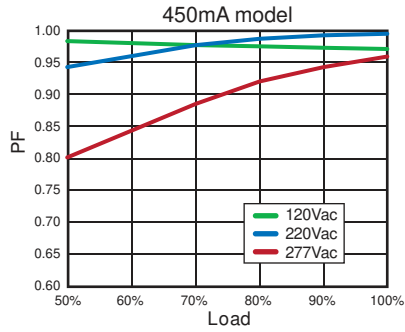
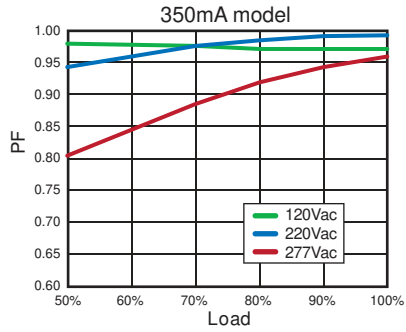


Total Harmonic Distortion  
700mA model

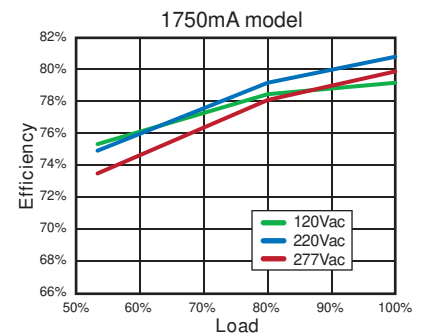
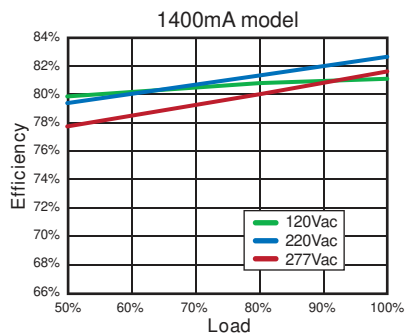
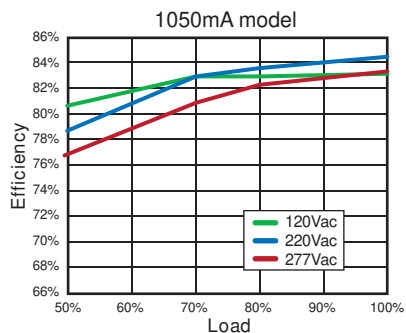
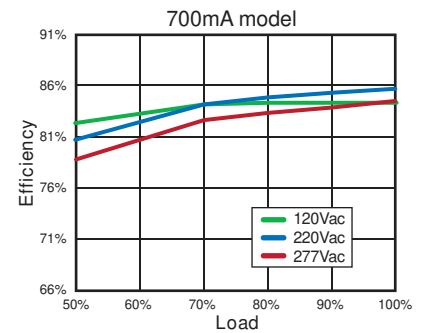
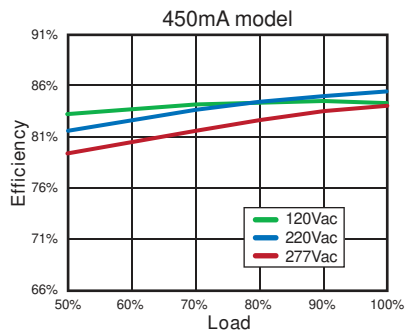
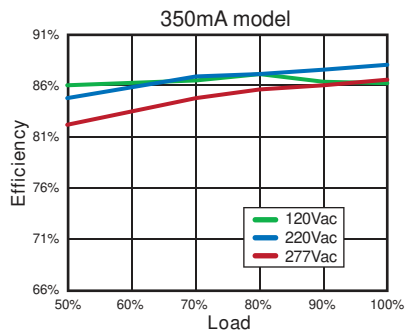


Safety Cert.	Standard
UL/CUL	UL8750, UL935, UL1012, UL1310 Class 2, CSA-C22.2 No. 107.1, CSA-C22.2 NO. 223-M91 Class 2
CE	EN61347-1, EN61347-2-13
FCC Part 15 Class B	ANSI C63.4: 2009
EMC Standard	Notes
EN55015	Conducted emission Test & Radiated emission Test
EN61000-3-2	Harmonic current emissions
EN61000-3-3	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, line to earth 4 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
ANSI/IEEE C62.41-1991	Transient Protection, power supply shall comply with Class A operation. The line transient shall consist of seven strikes of a 100 kHz ring wave, 2.5 kV level, for both common mode and differential mode.

**Power Factor Characteristics** (*constant current models*)



**Efficiency / Load** (*constant current models*)

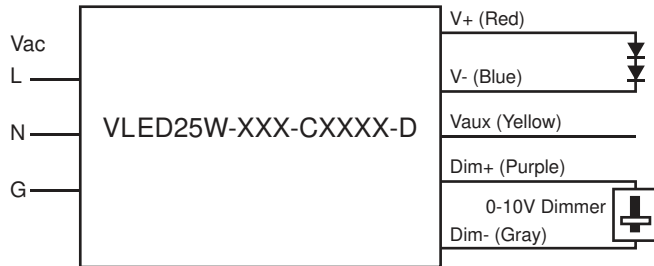


## Dimming Control

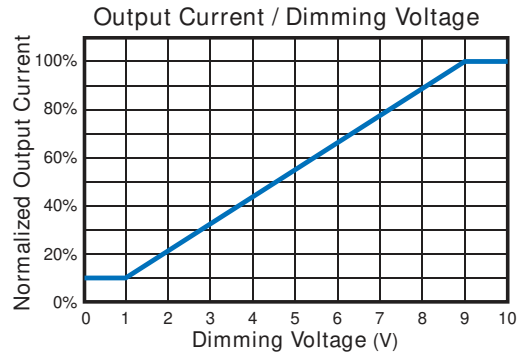
The dimmer control is operated from an input signal of 1 – 10 Vdc. Recommended implementation provided below.

Parameters	Minimum	Typical	Maximum
12V output voltage	10.8V	12V	13.2V
12V output source current	0 mA	—	20mA
Absolute maximum voltage on the 1-10v input pin	0V	—	15V
Source current on 1-10V input pin	0µA	—	200µA

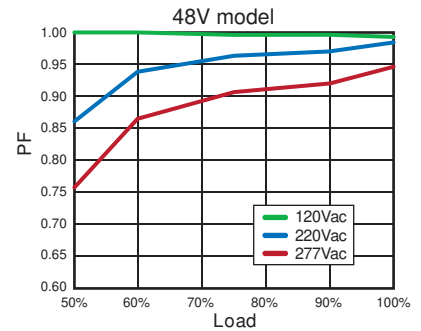
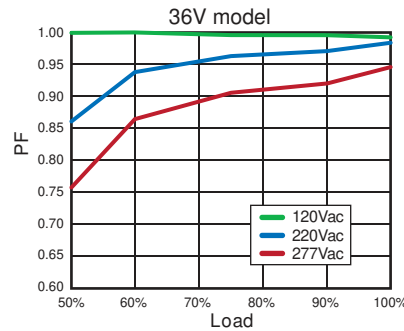
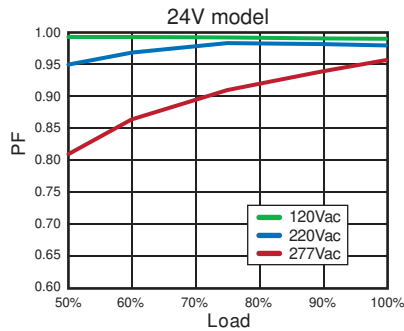
### Typical Analog 0-10V Dimming Circuit



Note: Do not connect Dim- to V-



### Power Factor Characteristics (constant voltage models)



### Efficiency / Load (constant voltage models)

