Characteristics

IP67

c UL us LISTED

DC12V

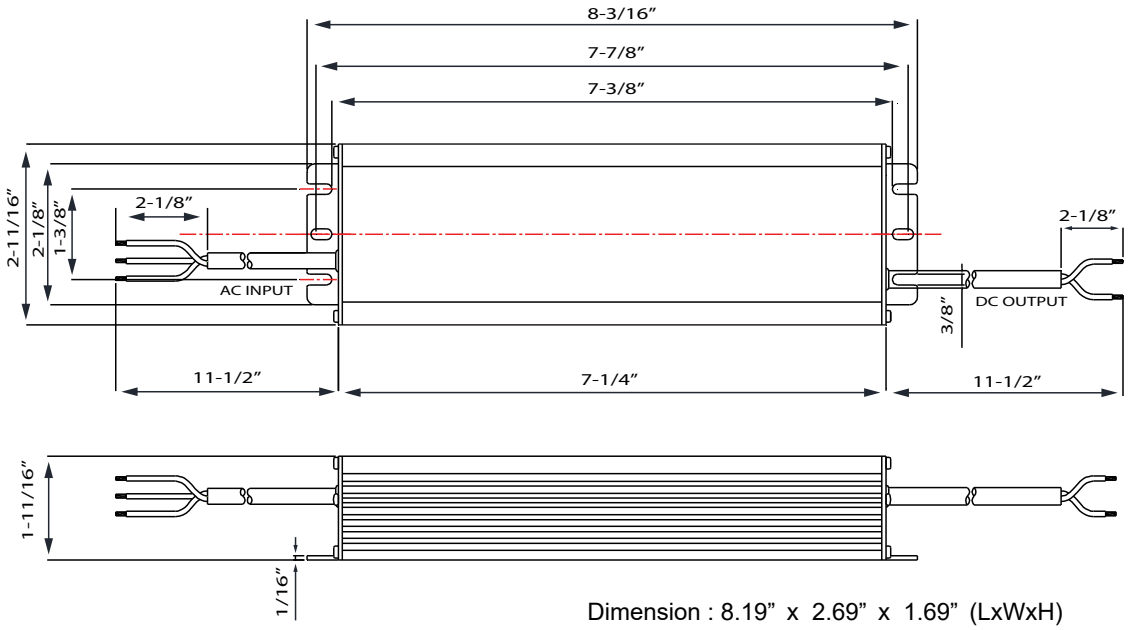
Constant Voltage MODE

CE

Constant Voltage Design (C.V. mode)

- AC Input automatic voltage selection: 110-277Vac (60/50Hz)
- Protections: Overload / Over Voltage / Short Circuit / Over Temperature
- IP67 Design for outdoor installations; dry, damp and wet locations
- Suitable for LED lighting and moving sign applications
- Surge immunity: Line-Line 5KV, Line-Earth 10KV
- High power factor > 0.96 (230Vac & Full load)
- Metal case
- Class P power unit
- Standard Safety standards: UL8750 recognized U.S and Canada certified
- EMC standards: FCC Part 15 // UL Listed: **E332689**
- 5-Year Limited Warranty: subject to terms and conditions; see full warranty policy for details. (Page 6)

Physical



Dimension : 8.19” x 2.69” x 1.69” (LxWxH)

Weight : 2Lb 3oz

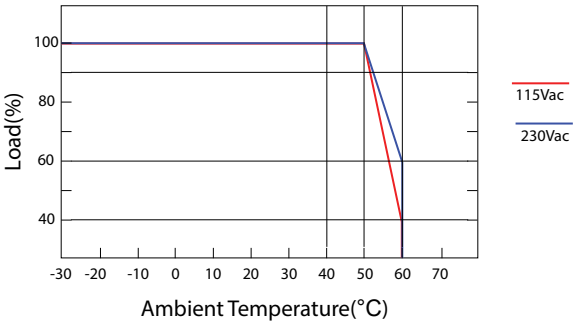
Technical Details

Model Nº		LSV-150B12
INPUT	VOLTAGE RANGE	AC110~277V (Min 90)
	FREQUENCY RANGE	50~60 Hz
	EFFICIENCY (TYP.)	91%
	AC CURRENT	2.0A Max. 110-277Vac & full load
	INRUSH CURRENT (TYP)	COLD START 75A/230VAC
	LEAKAGE CURRENT	<0.75mA / 277VAC
OUTPUT	DC VOLTAGE	12V
	RATED CURRENT	12.5A
	RATED POWER	150W
	RIPPLE&NOISE (max.) *1	10%
	OUTPUT OVERSHOOT	10%
	OUTPUT CURRENT TOLERANCE	+/- 5%
	LINE REGULATION *2	1%
	LOAD REGULATION	3%
	TURN-ON DELAY TIME	1S/115Vac at full load, 0.5/230Vac at full load
PROTECTION	SHORT CIRCUIT	The input power shall decrease when the output rail short
	OVER CURRENT	Hiccup mode: recovers automatically after fault condition is removed
	OVER VOLTAGE	1.1-1.3 maximum load
	OVER TEMPERATURE	90+/-10ºC (Temp. Sensor) Shuts off: recovers automatically after fault conditions is removed
DIMENSION / WEIGHT		8.19" X 2.69" X 1.69" (L*W*H) ~ 2Lb 3oz / PC

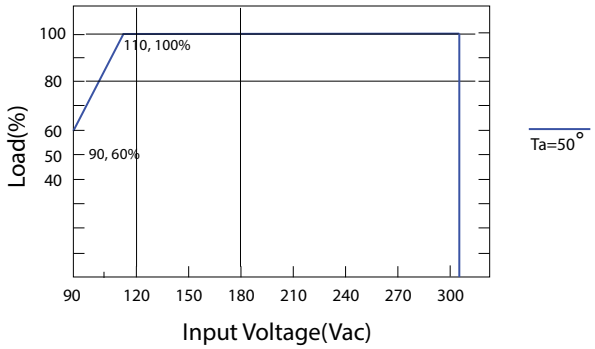
NOTE

1. Full load, measured by 20MHz bandwidth oscilloscope and the output paralleled a 0.1 uF ceramic capacitor and a 10uF electrolytic capacitor
2. L 25ºC +/- 10ºC ambient temperature, input voltage changes from 110Vac to 277Vac
3. L 25ºC +/- 10ºC ambient temperature, 230Vac input, load changes from 50% to 100%
4. When the output voltage is over 110~200% rated load voltage, the driver shuts off automatically and enters protections status. The driver will work normally after fault conditions removed and AC input re-apply

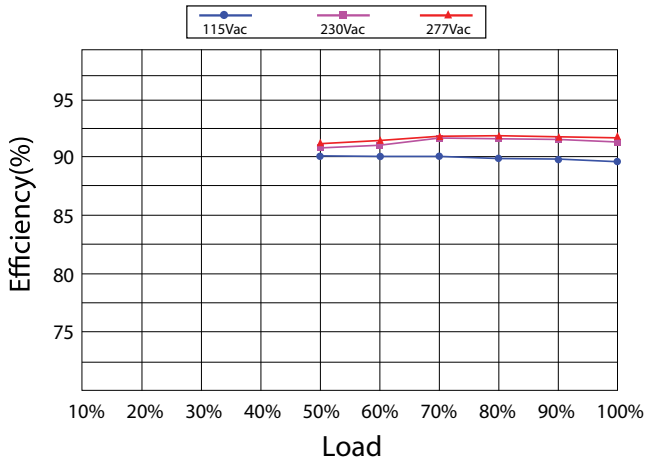
■ DERATING CURVE



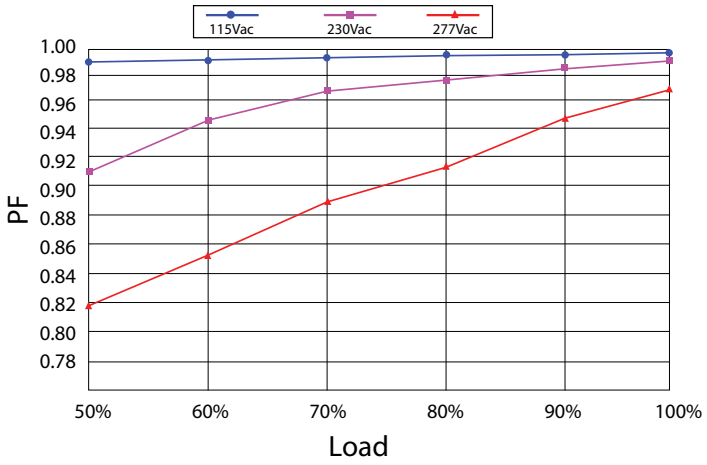
■ OUTPUT POWER VS INPUT VOLTAGE



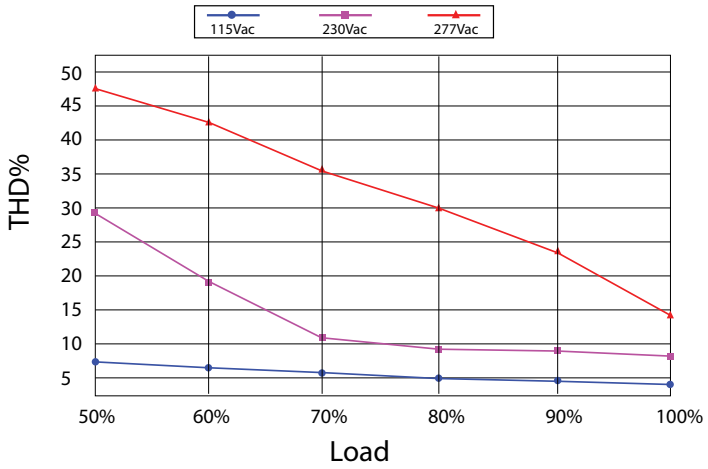
EFFICIENCY VS LOAD



POWER FACTOR VS LOAD CURVE



TOTAL HARMONIC DISTORTION VS LOAD CURVE



Step-by-Step Installation Guide

(Model Nº LSV-150B012)

Required Tools	• LED Power Supply • Wirenuts Connectors • Jumper Cord 110 AC Current (If applicable) • Screwdriver • Voltage tester • Wire Stripper
Package Contents	• 1 Unit - 10 units/box
Safety Warnings	• LED power supply must be installed and operated by qualified professionals • Cut off the main 110-277Vac power before installation • Do not handle electrical parts with wet hands • Use appropriate personal protective equipment (PPE), such as safety shoes, gloves, etc.

Step 1: Turn Off Power

- Switch off the circuit breaker supplying power to the installation area.
- Use a voltage tester to confirm no power is present before beginning any work.

Step 2: Identify the Wires

Identify the input and output wires on the LED Power Supply:

- **AC Input (three conductors):**
  - Hot/Line: Black or bronze wire
  - Neutral: White or blue wire
  - Ground (Earth): Green or green/yellow wire
- **DC Output (two conductors):**
  - Positive (+): Red wire
  - Negative (-): Black wire

Step 3: Verify the Supply Voltage

- Turn on the main circuit breaker.
- Using a voltage tester, verify the voltage is **110~277VAC.**
- Turn the curcuit breaker off again before proceeding with the installation.

Warning: Ensure the voltage from the breaker is within the LED driver's rated operating range (110-277VAC). Applying a voltage outside the specified range may damage the LED driver.

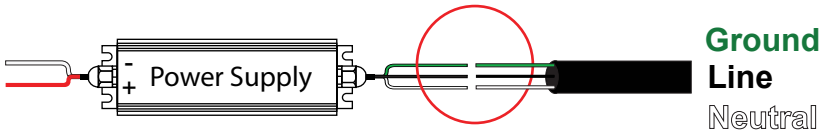
Step 4: Connect the Power Supply

- Connect the AC input wires of the LED power supply to the main AC power (Breaker or AC plug Cord)

Hot (Line) → Hot (Line)

Neutral → Neutral

Ground → Ground

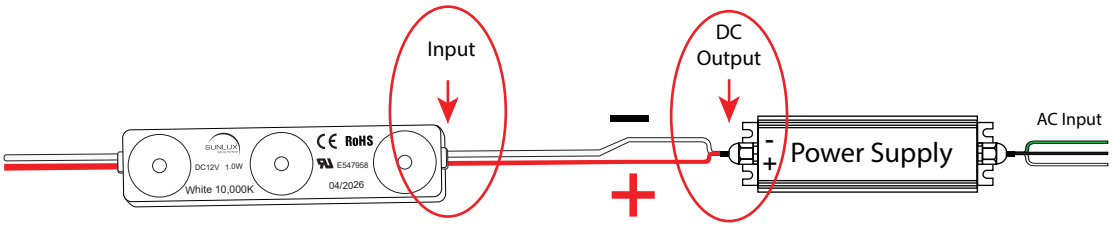


Important: Ensure all wire connections are secure, properly insulated, and comply with applicable electrical codes.

Step 5: Restore Power and Test

Important: Do not exceed 80% of the power supply's maximum output capacity. Operating within this limit helps ensure reliable performance and extends the life of the power supply.

- Ensure the DC output wires (Positive (+) and Negative (-)) are separated and do not touch each other.
- Turn on the main circuit breaker or plug the AC power cord into the power outlet.
- Using a voltage tester or multimeter, measure the DC output voltage of the power supply.
- Verify that the output voltage matches the voltage required by your LED lights.
- After confirming the correct output voltage, turn off the power before connecting the LED load.
- Connect the LED load to the DC output terminals. observing the correct **polarity**:
  - Positive (+) to Positive (+)
  - Negative (-) to Negative (-)
- Ensure all connections are properly insulated and comply with applicable electrical codes.
- Restore power and verify that the LED lights operate correctly.



Product Warranty Policy

ELITE LED SUPPLY is committed to excellence in product quality and the full satisfaction of its customers. In support of this commitment, it provides a five (5) year limited warranty covering the repair or replacement of products under **specified operating conditions and in accordance with the product specifications.**

Operating Conditions:

(Model Nº LSV-150B012)

- Power supply must be installed and operated by qualified professionals.
- Power supply must operate within the specified electrical range and environmental conditions (ingress protection rating of IP67).
- Power supply must be connected to a 110-277VAC circuit.
- Do not exceeding 80% of the power supply's maximum output capacity.

Warranty Coverage:

(Model Nº LSV-150B012):

- Warranty cover the repair or replacement of power supply under specified operating conditions.

Period Coverage:

(Model Nº LSV-150B012):

- The warranty is valid for 5 years from the day of purchase

The Warranty Dose Not Cover:

(Model Nº LSV-150B012):

- Misuse, improper installation, electrical surges, or physical damage
- Labor or installation costs
- Shipping and delivery costs for warranty claims, **unless otherwise stated**

Warranty Terms and Conditions

(Model Nº LSV-150B012):

- Defective power supplies must be reported within 48 hours of receipt
- All the claims require a valid proof of purchase (Invoice) which must match ELITE LED SUPPLY records
- Power supplies are elegible for repair or replacement only after inspection
- Approved claims will be repaired or replaced in accordance of manufacturer terms within 1-5 business days

- **Shipping and Delivery Costs for Warranty Claims:**

  - **Manufacturing defects:** ELITE LED will refund the shipping / delivery costs or issue a credit for a future order
  - **Defect due to misuse, improper installation, electrical surges, or physical damage:** The customer is responsible for all shipping and delivery costs related to the warranty claim.